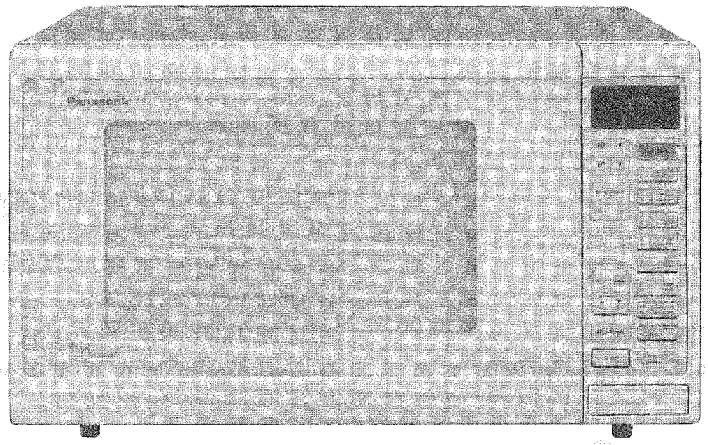
ORDER NO. MOD9507059C3

Service Manual

Microwave Oven

NN-7855, NN-6855, NN-6755, NN-6705, NN-6455, NN-6405, NN-6755A,NN-6705A,NN-6455A, NN-6405A



Specifications

	NN-7855	NN-6＊＊5/A
Power Source :	240 V AC Single Phase, 50 Hz·····For QPQ, KNQ, Models 230 V AC Single Phase, 50 Hz·····For JPG Models 220 V AC Single Phase, 50 Hz·····For VPE, KKE Models 220 V AC Single Phase, 50/60 Hz·····For SNM Models	
Power Requirement :	1400 W	
High Frequency Output :	900 W (IEC705)	
Microwave Frequency :	2450 MHz	
Timer :	99 min. 99 sec.	
Outside Dimensions :	595 mm (W) × 415 mm (D) × 356 mm (H)	555 mm (W) × 425 mm (D) ×306 mm (H)
Oven Cavity Dimensions :	415 mm (W) × 385 mm (D) × 259 mm (H)	375 mm (W) × 395 mm (D) × 201 mm (H)
Weight :	18.5 kg	17.0 kg
Specifications subject to change without notice.		

National/Panasonic

© 1995 Matsushita Electric Industrial Co.,Ltd. All rights reserved. Unauthorized copying and distribution is a violation of law.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

WARNING

* This product should be serviced only by trained, qualified personnel.
This service manual covers products for following markets.
When troubleshooting or replacing parts, please refer to the country identifications shown below for your applicable product specification.

QPQ ..... For Australia
VPE ..... For South Africa
KNQ ..... For Kuwait, Doha Qatar, Oman, Bahrain, Pakistan
JPG ..... For New Zealand
KKE ..... For U.A.E, Egypt, Iran
SNM ..... For Saudi Arabia

CONTENTS

(Page)

FEATURE CHART 3
CONTROL PANEL 4
OPERATION PROCEDURE 5
SCHEMATIC DIAGRAM 7
DESCRIPTION OF OPERATING SEQUENCE 11
CAUTIONS TO BE OBSERVED WHEN TROUBLESHOOTING 13

(Page)

DISASSEMBLY AND PARTS REPLACEMENT PROCEDURE 14
COMPONENT TEST PROCEDURE 17
MEASUREMENTS AND ADJUSTMENTS 19
TROUBLESHOOTING GUIDE 20
EXPLODED VIEW AND PARTS LIST 24
DIGITAL PROGRAMMER CIRCUIT PARTS LIST 45

PRODUCT DISTINATION

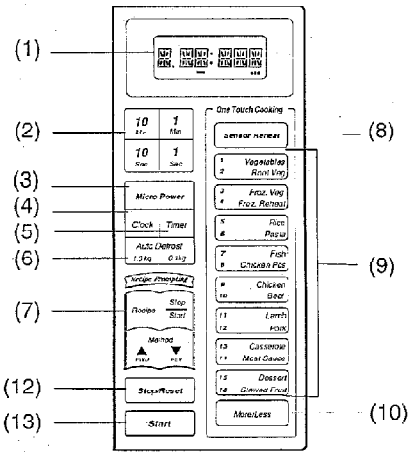
MODEL	QPQ	JPG	VPE	KNQ	KKE	SNM
NN-7855	○	○	○	○	○	○
NN-6855	—	○	—	—	—	—
NN-6755	○	—	○	○	○	○
NN-6705	○	○	—	—	—	—
NN-6455	○	○	○	—	—	—
NN-6405	○	—	—	—	—	—
NN-6755A	○	—	—	—	—	—
NN-6705A	○	—	—	—	—	—
NN-6455A	○	—	—	—	—	—
NN-6405A	○	—	—	—	—	

FEATURE CHART

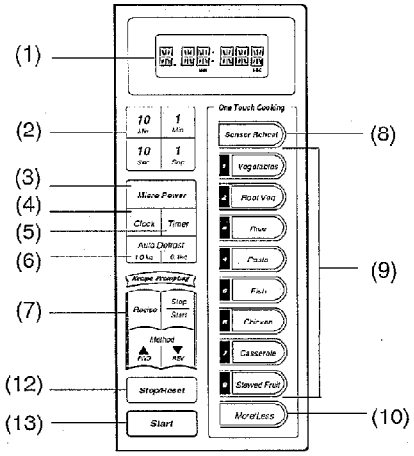
MODEL / FEATURE	NN-7855 NN-6855	NN-6755/A NN-6705/A	NN-6455/A NN-6405/A
Three Stage Cooking	○	○	○
Auto Defrost	○	○	○
Sensor Reheat	○	○	—
One Touch Cooking (Sensor)	○ 12 Menu	○ 8 Menu	—
Auto Reheat	—	—	○
Recipe Promopting	○	○	○
Child Safety Lock	○	○	○
Operating Guide on the Display	○	○	○
Delay Start	○	○	○
Timer/ Stand	○	○	○
Digital Clock	○	○	○

CONTROL PANEL

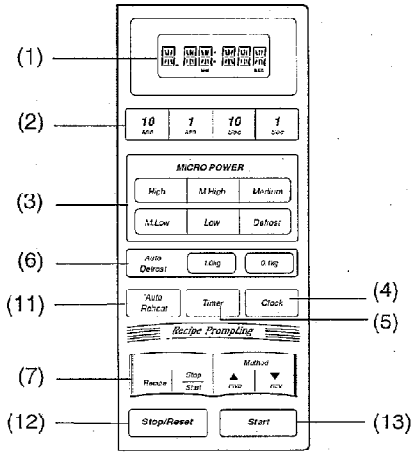
NN-7855/6855



NN-6755/6705



NN-6455/6405



★ Your Control Panel design might be different from the illustration in this book.

(1) Display Window
(2) Time Pads
(3) Micro Power Pad(s)
(4) Clock Pad
(5) Timer Pad
(6) Auto Defrost Pad
(7) Recipe Prompting Pads
(8) Sensor Reheat Pad
(9) One Touch Cooking Pads
(10) More/Less Pad
(11) Auto Reheat Pad

(12) Stop/Reset Pad

Before cooking: One tap clears your instructions. During cooking: One tap temporarily stops the cooking process. Another tap cancels all your instructions and time of day appears in the display window.

(13) Start Pad

One tap allows oven to begin functioning. If door is opened or STOP/RESET Pad is pressed once during oven operation, START Pad must again be pressed to restart oven.

Word Prompters:

When pads are pressed, a beep sound is heard and the corresponding letter or word(s) appear and roll across the window. If a pad is pressed and no beep is heard, the unit does not or cannot accept the instruction. As each pad is pressed the corresponding word(s) roll across the window. Words will automatically appear to prompt the user to perform the next step. It is not necessary to wait for the words to appear before pressing pads for the next step. A two beep sound is heard between stages. At the end of any complete program, the oven will beep five times and "ENJOY YOUR MEAL" will appear in the display window.

OPERATION AND DIGITAL PROGRAMMER CIRCUIT TEST PROCEDURE

Operation Guide on the display:
To assist you in programming, the next operation will appear in the display. When you get used to operate the oven, you can turn off the operation guide.

To turn off:

Timer → OPERATION GUIDE OFF

Press 3 times

To turn on:

Timer → OPERATION GUIDE ON

Press 3 times

1. To Set Clock

OPERATION	SCROLL DISPLAY
1. Plug the power supply cord into wall outlet.	*WELCOME TO WORD PROMPTING*
2. Press **Clock** pad.	☼ *––SET TIME*
3. Enter time of day (TOD) by pressing appropriate **Time** pads.	11☼25 *––PRESS CLOCK*
4. Press **Clock** pad. TOD has now been resistered into the digital programmer circuit and will count up by minutes.	11:25

2. Time Cooking for Two Stage

OPERATION	SCROLL DISPLAY
1. Place a water load in the oven.	
2. Press **Micro Power** pad once to set High power. (1st stage)	*HIGH* *––SET TIME*
3. Set for 5 seconds by pressing **Time** pad.	5 SEC *––PRESS START* *HIGH*
4. Press **Micro Power** pad 4 times to set Medium power. (2nd stage)	*MEDIUM* *––SET TIME*
5. Set for 1 minute by pressing **Time** pad.	1 00 MIN SEC *––PRESS START* *MIDIUM*
6. Press **Start** pad.	5 SEC
7. When 1st stage cooking time has elapsed, oven automatically switches to 2nd stage cooking.	1 00 MIN SEC
8. When 2nd stage cooking time has elapsed, oven beeps 5times and shuts off.	*ENJOY YOUR MEAL* 11:25

3. Auto Weight Defrost

OPERATION	SCROLL DISPLAY
1. Set the weight for 1 kg by pressing **1.0 kg** pad.	*1.0 KG* *––PRESS START*
2. Press **Start** Pad. NN-7855···21 min. 10 sec.	25 40 MIN SEC
3. Press **Stop/Reset** Pad twice. Oven shuts off.	*Time of day or colon appears in the display.*

4. Demonstration Mode

The demonstration mode designed for retail store display. It is not designed for home use. Cooking will not operate during demonstration mode.
To set demonstration mode

OPERATION	SCROLL DISPLAY
1. Press Clock pad 3 times continuously. Note: To cancel demonstration mode, press Clock pad 3 times continuously.	*WELCOME TO WORD PROMPTING* *--PRESS ANY KEY*

5. To Set Child Safety Lock

OPERATION	SCROLL DISPLAY
1. Press **Start** pad 3 times continuously. "*LOCK" appears in the display.	*LOCK

6. To Reset Child Lock

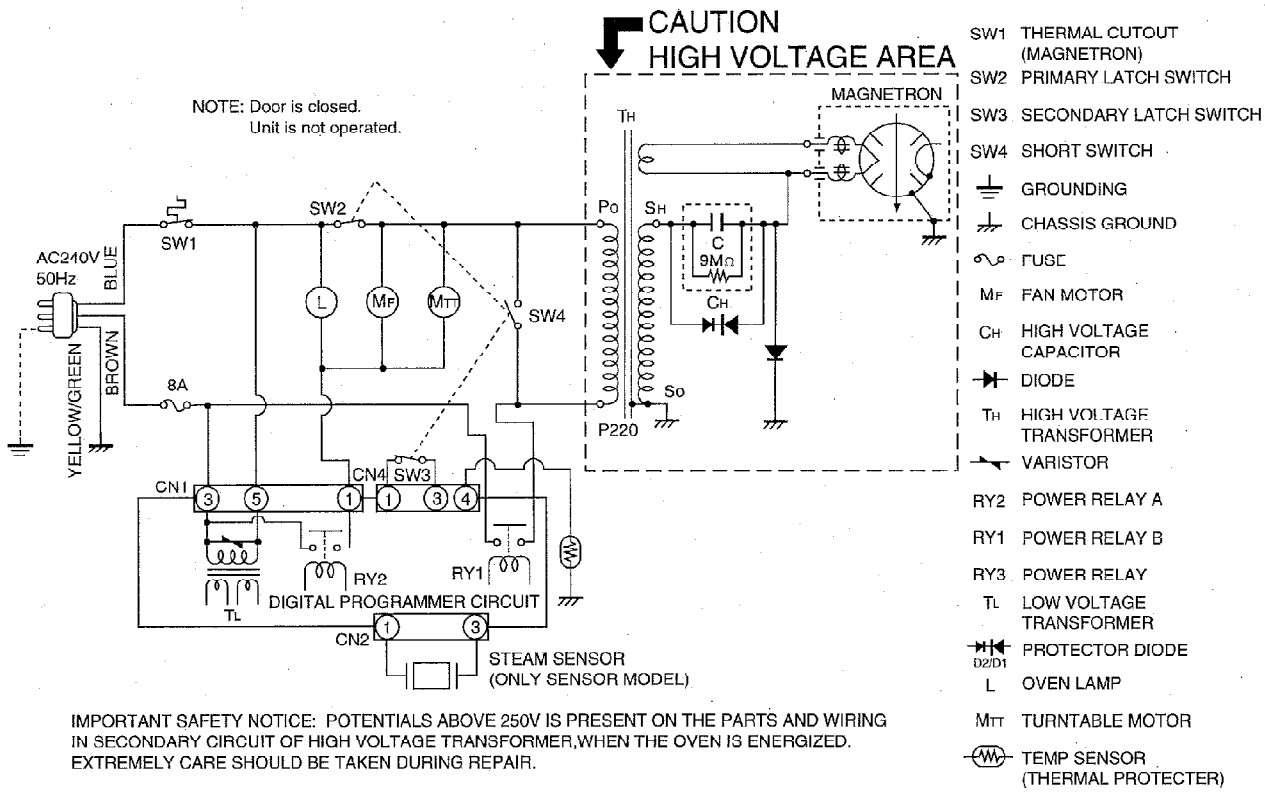
OPERATION	SCROLL DISPLAY
1. Press **Stop/Reset** pad 3 times continuously. Time of day or colon appears in the display.	11:25

7. Sensor Cooking

NOTE: Make sure that the outer panel is installed before Sensor cooking test, since Sensor function does not operate properly without the outer panel.

OPERATION	SCROLL DISPLAY
1. Pour 150±15cc (4.5±1/2ozs) of room temperature water in a beaker, place the beaker in the center of the oven.	
2. Press the desired Sensor Cooking Category pad. e.g. Set to Sensor Reheat	*SENSOR REHEAT* *--PRESS START*
3. Press **Start** pad.	AUTO
4. The steam sensor detects steam about 1.5 to 4 minutes after the Start pad is pressed.Sensor cooking (T1) automatically switches to time cooking (T2). "Auto" disappears with beep sounds and the remainder of cooking time appears in the display window. NOTE: Cooking time will vary depending on the water temperature, the shape of beaker or the power source voltage.	8 SEC 23 SEC
5. When the balance of cooking time has elapsed, oven stops and beeps 5 times.	*ENJOY YOUR MEAL* 11:25

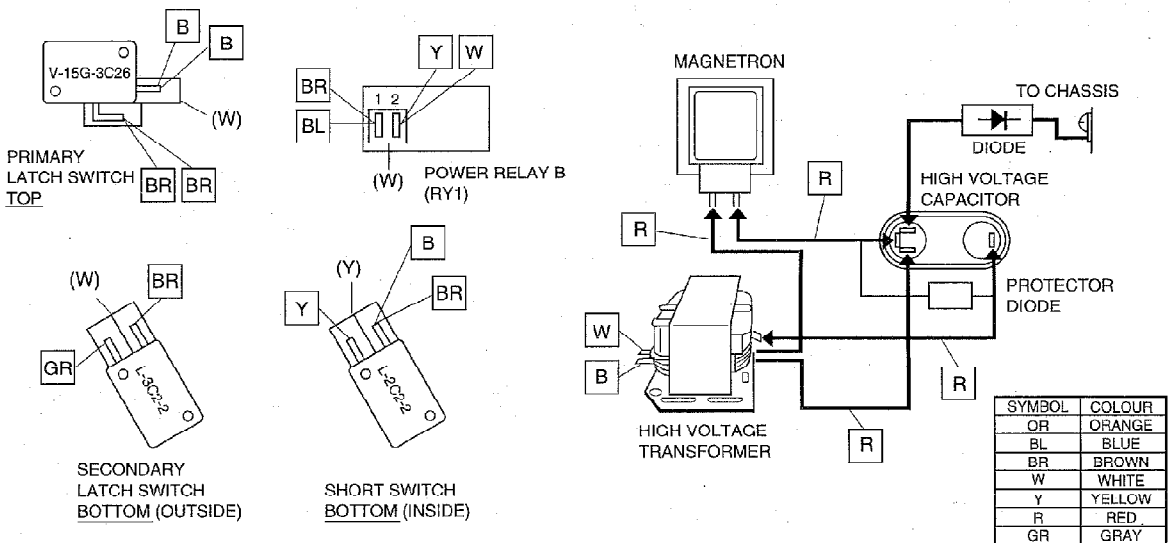
SCHEMATIC DIAGRAM (FOR QPQ MODELS)



IMPORTANT SAFETY NOTICE: POTENTIALS ABOVE 250V IS PRESENT ON THE PARTS AND WIRING IN SECONDARY CIRCUIT OF HIGH VOLTAGE TRANSFORMER,WHEN THE OVEN IS ENERGIZED. EXTREMELY CARE SHOULD BE TAKEN DURING REPAIR.

WIRING DIAGRAM

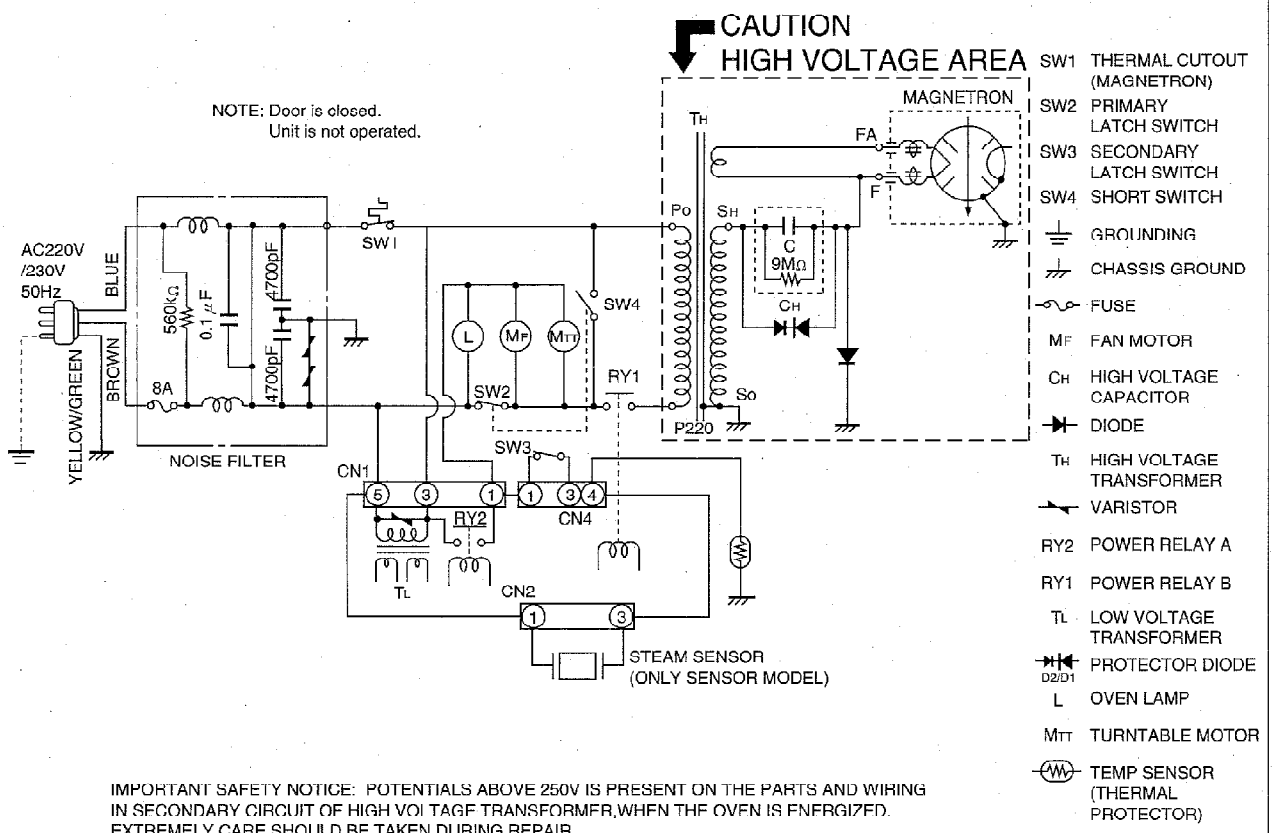
NOTE: *When replacing, check the lead wire colour as shown.
*Colours shown by ( ) indicate colours of lead wire connector housing.



SYMBOL	COLOUR
OR	ORANGE
BL	BLUE
BR	BROWN
W	WHITE
Y	YELLOW
R	RED
GR	GRAY
B	BLACK

S-760H QPQ
M001

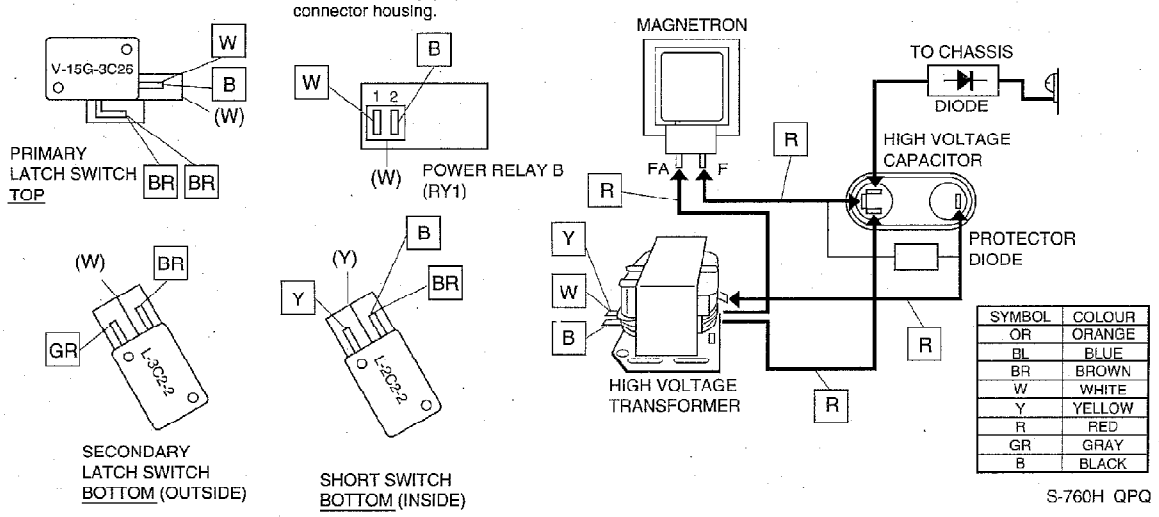
SCHEMATIC DIAGRAM (FOR JPG, VPE MODELS)



IMPORTANT SAFETY NOTICE: POTENTIALS ABOVE 250V IS PRESENT ON THE PARTS AND WIRING IN SECONDARY CIRCUIT OF HIGH VOLTAGE TRANSFORMER,WHEN THE OVEN IS ENERGIZED. EXTREMELY CARE SHOULD BE TAKEN DURING REPAIR.

WIRING DIAGRAM

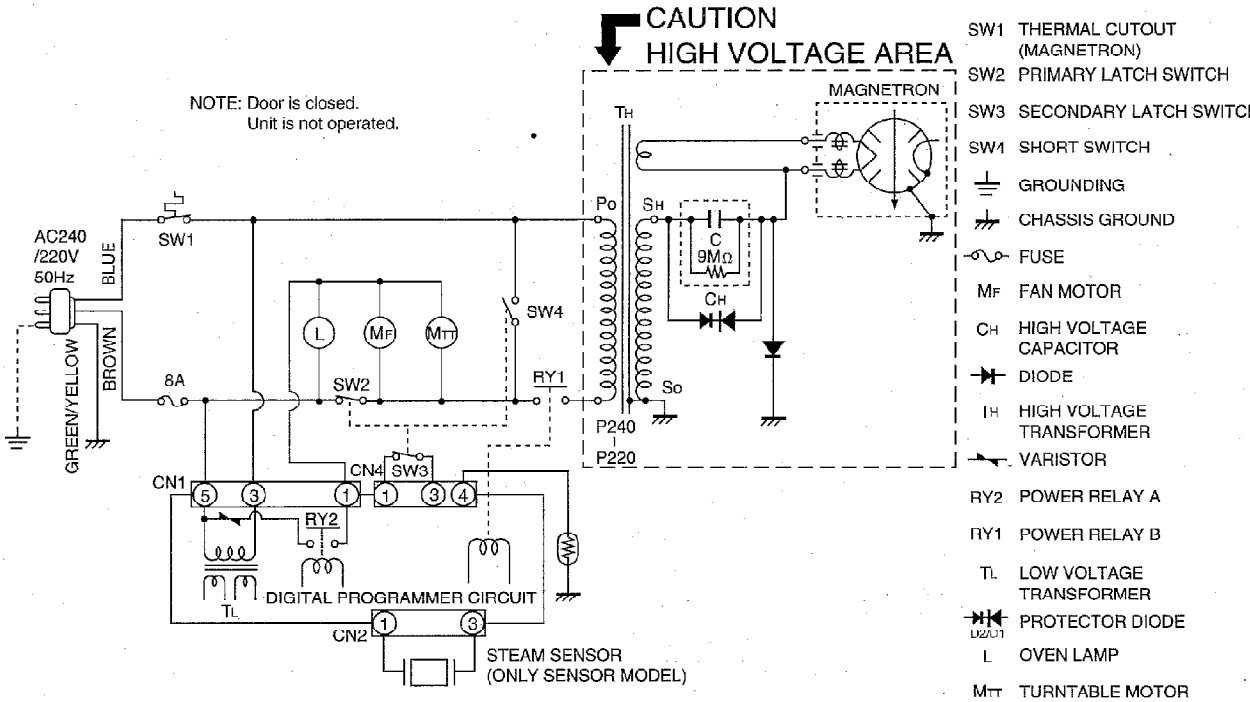
NOTE: *When replacing, check the lead wire colour as shown.
*Colours shown by ( ) indicate colours of lead wire connector housing.



SYMBOL	COLOUR
OR	ORANGE
BL	BLUE
BR	BROWN
W	WHITE
Y	YELLOW
R	RED
GR	GRAY
B	BLACK

S-760H QPQ
M002

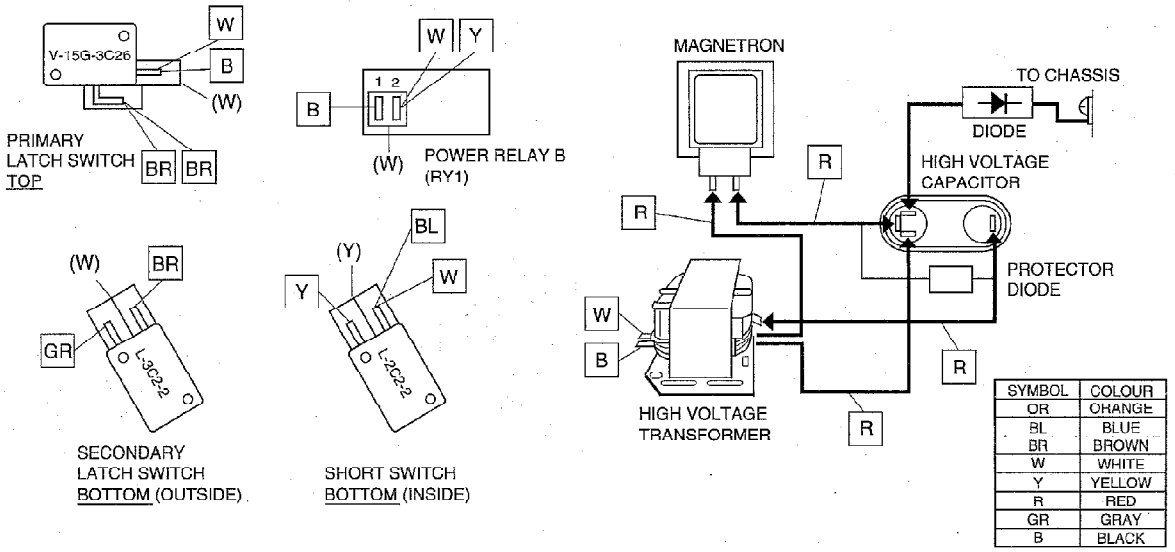
SCHEMATIC DIAGRAM (FOR KNQ, KKE MODELS)



IMPORTANT SAFETY NOTICE: POTENTIALS ABOVE 250V IS PRESENT ON THE PARTS AND WIRING IN SECONDARY CIRCUIT OF HIGH VOLTAGE TRANSFORMER,WHEN THE OVEN IS ENERGIZED. EXTREMELY CARE SHOULD BE TAKEN DURING REPAIR.

WIRING DIAGRAM

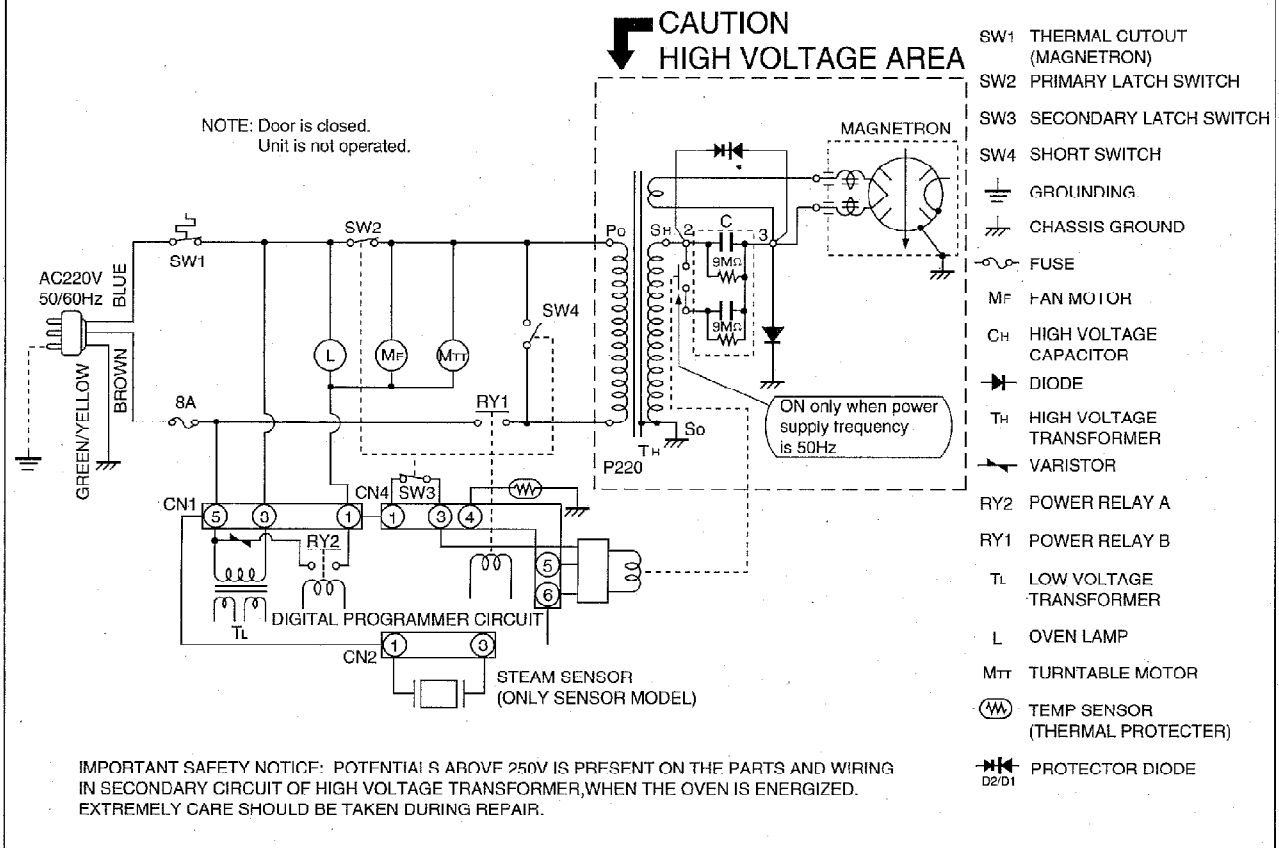
NOTE: *When replacing, check the lead wire colour as shown.
*Colours shown by ( ) indicate colours of lead wire connector housing.



SYMBOL	COLOUR
OR	ORANGE
BL	BLUE
BR	BROWN
W	WHITE
Y	YELLOW
R	RED
GR	GRAY
B	BLACK

S-760H QPQ
M003

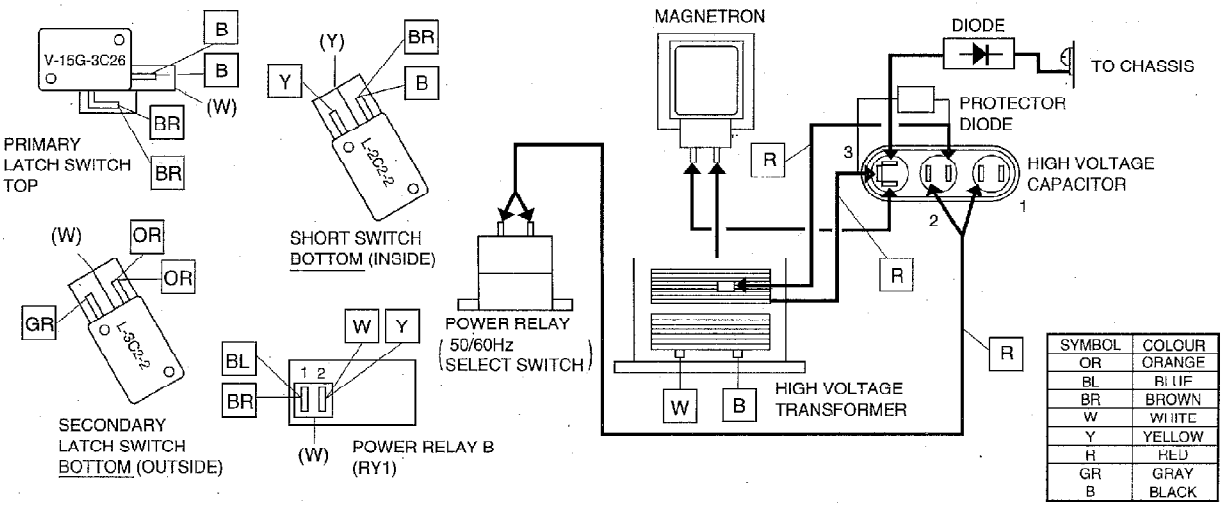
SCHEMATIC DIAGRAM (FOR SNM MODELS)



IMPORTANT SAFETY NOTICE: POTENTIAL S ABOVE 250V IS PRESENT ON THE PARTS AND WIRING IN SECONDARY CIRCUIT OF HIGH VOLTAGE TRANSFORMER,WHEN THE OVEN IS ENERGIZED. EXTREMELY CARE SHOULD BE TAKEN DURING REPAIR.

WIRING DIAGRAM

NOTE: *When replacing, check the lead wire colour as shown.
*Colours shown by ( ) indicate colours of lead wire connector housing.



SYMBOL	COLOUR
OR	ORANGE
BL	BLUE
BR	BROWN
W	WHITE
Y	YELLOW
R	RED
GR	GRAY
B	BLACK

S-760H QPQ
M004

DESCRIPTION OF OPERATING SEQUENCE

1. Variable power cooking control

The coil of power relay B (RY1) is energized intermittently by the digital programmer circuit, when the oven is set at any power selection except for High power position. The digital programmer circuit controls the ON-OFF time of power relay B contacts in order to vary the output power of the microwave oven from "Low" to "High" power. One complete ON and OFF cycle of power relay B is 22 seconds.

The relation between indications on the control panel and the output of the microwave oven is as shown in table.

NOTE: The ON/OFF time ratio does not correspond with the percentage of microwave power since approximately 2 seconds are required for heating of magnetron filament.

POWER SETTING	OUTPUT POWER(%) APPROX.	ON-OFF TIME OF POWER RELAY B (RY1)	
		ON(SEC)	OFF(SEC)
HIGH	100 %	22	0
MEDIUM-HIGH	70 %	17	5
MEDIUM	55 %	13	9
MEDIUM-LOW	30 %	8	14
LOW	10 %	5	17
DEFROST	30 %	8	14

2. Auto defrost, Auto reheat, control

When those Auto Control feature is selected and the Start Pad is tapped:

(A) The digital programmer circuit determines the power level and cooking time to complete cooking and indicates the operating state in the display window.
Table shows the corresponding cooking times for respective serving or weight by categories.

(B) When cooking time in the display window has elapsed, the oven turns off automatically by a controll signal from the digital programmer circuit.

Auto Defrost

WEIGHT SELECTED	COOKING TIME	
	NN-7855	NN-6＊＊5
1.0 kg	21 min. 10 sec.	25 min. 40 sec.

Auto Reheat (NN-6455/A, NN-6405/A)

SELECTED WEIGHT	COOKING TIME
280 g	2 min. 00 sec.
680 g	6 min. 10 sec.

3. One touch cooking (Auto sensor cooking)

Auto sensor cooking is a revolutionary way to cook by microwave without setting a power level or selecting a time.
All that is necessary is to select an Auto Sensor Program before starting to cook.

Understanding Auto Sensor Cooking

As a food cooks, a certain amount of steam is produced. If the food is covered, this steam builds up and eventually escapes from the container. In Auto Sensor Cooking, a carefully designed instrument, called the steam sensor element, senses this escape of steam. Then, based upon the Auto Sensor Program selected, the unit will automatically determine the correct power level and the proper length of time it will take to cook the food.

NOTE: Auto Sensor Cooking is successful with the foods and recipes found in the Auto Sensor Cooking Guide. Because of the vast differences in food composition, items not mentioned in the Cooking Guide should be prepared in the microwave oven using power select and time features. Please consult Variable Power Microwave Cookbook for procedures.

Explanation of the Auto Sensor Cooking process

1) During the first 10 second period there is no microwave activity, and when calculating the T2 time by using the formula below make sure this 10 seconds is subtracted from the T1 time. In other words T1 time starts at the end of the 10 second period.
2) **T1 time**···The total amount of time it takes the microwave oven to switch to T2 time after the 10 second period.
3) **T2 time**···When the steam escapes from the cooking container placed in the oven, the steam sensor detects it and the microprocessor calculates the balance of cooking time. This T2 time is then shown in the display and begins counting down.

Balance of cooking time (T2 time)

The balance of cooking time which is called T2 time, can be calculated by the following formula.

T2 time (in sec.) =T1 time × K factor

NOTE: Remember, the T1 time starts after the 10 second period. The coefficient K is programmed into the microprocessor memory and they are listed in the following tables along with the P1 and P2 powers.

NOTE: When "More" or "Less" pad is selected, the K factor varies resulting in T2 time to be increased or decreased.

Example of calculating the T2 time

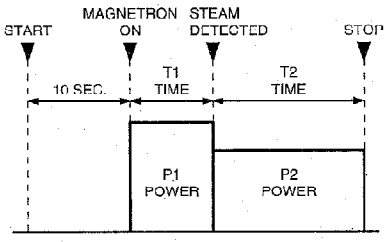
Example 1: If the T1 time is measured to be 2 minutes and 40 seconds after the 10 second period, and the Auto program selected is
Vegetables:
T2=T1 × K
= 2 min. and 40 sec. × 0.3
= 160 sec. × 0.3
= 48 sec.

4. Auto Sensor Reheat

Auto Sensor Reheat is a quick and easy way to reheat refrigerator and room temperature foods.
Simply press the reheat pad. There is no need to select power level and cooking time.

NOTE: The Auto Sensor Reheat process is same as Auto Sensor Cooking process.

AUTO SENSOR COOKING/REHEAT PROCESS



60-021M

One Touch Cooking (Auto Sensor Cook)

Category	P1 Power	P2 Power	K factor Standard
Vegetables	HIGH	HIGH	0.3

Sensor Reheat

Category	P1 Power	P2 Power	K factor Standard
Sensor Reheat	HIGH	M.HIGH	0.1

CAUTIONS TO BE OBSERVED WHEN TROUBLESHOOTING

Unlike many other appliances, the microwave oven is high-voltage, high-current equipment. Though it is free from danger in ordinary use, extreme care should be taken during repair.

CAUTION

Servicemen should remove their watches whenever working close to or replacing the magnetron.

1. Check the grounding

Do not operate on a 2-wire extension cord. The microwave oven is designed to be used when grounded. It is imperative, therefore, to make sure it is grounded properly before beginning repair work.

2. Warning about the electric charge in the high voltage capacitor

For about 30 seconds after the oven is turned off, an electric charge remains in the high voltage capacitor.
When replacing or checking parts, remove the power plug from the outlet and short the terminal of the high voltage capacitor (terminal of lead wire from diode) to chassis ground with an insulated handle screwdriver to discharge.

WARNING

There is high-voltage present, with high-current capabilities in the circuits of the high voltage winding and filament winding of the high voltage transformer. It is extremely dangerous to work on or near these circuits with oven energized.
DO NOT measure the voltage in the high voltage circuit including filament voltage of magnetron.

WARNING

Never touch any circuit wiring with your hand nor with an insulated tool during operation.

3. When parts must be replaced, remove the power plug from the outlet.

4. When the 8A 250V fuse is blown due to the operation of short switch:

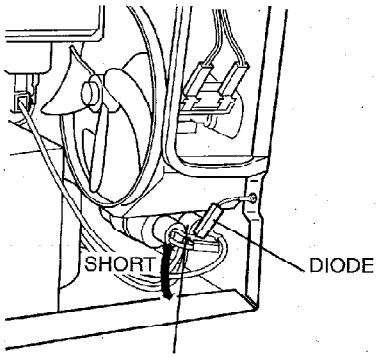
WARNING

When the 8A 250V. fuse is blown due to the operation of short switch, you must replace Primary latch switch and short switch. Also replace power relay B (RY1) when the continuity check reads shorted contacts (1-2).

(A) This is mandatory. Refer to "Adjustments and Measurement" for these switches.
(B) When replacing the fuse, confirm that it has the appropriate rating for these models.
(C) When replacing faulty switches, be sure mounting tabs are not bent, broken or otherwise deficient in their ability to hold the switches.

5. Avoid inserting nails, wire, etc. through any holes in the unit during operation.

Never insert a wire, nail or any other metal object through the lamp holes on the cavity or any other holes or gaps, because such objects may work as an antenna and cause microwave leakage.



01-003M

Touch chassis side first then short to the high voltage capacitor terminal.

6. Confirm after repair

(A) After repair or replacement of parts, make sure that the screws of the oven, etc. are neither loose nor missing.
Microwaves might leak if screws are not properly tightened.
(B) Make sure that all electrical connections are tight before inserting the plug into the wall outlet.

CAUTION
MICROWAVE RADIATION

DO NOT BECOME EXPOSED TO RADIATION FROM THE MICROWAVE GENERATOR OR OTHER PARTS CONDUCTING MICROWAVE ENERGY.

IMPORTANT NOTICE

1. The following components have potentials above 250V while the appliance is operated.
   - ※ Magnetron
   - ※ High voltage transformer
   - ※ High voltage diode
   - ※ High voltage capacitor
   - ※ Protector diode

   Pay special attention on these portions.
2. When the appliance is operated with the door hinge or magnetron fixed incorrectly, the microwave leakage can reach more than 5mW/cm^3. After repair or exchange, it is very important to check if magnetron and the door hinge is correctly fixed.

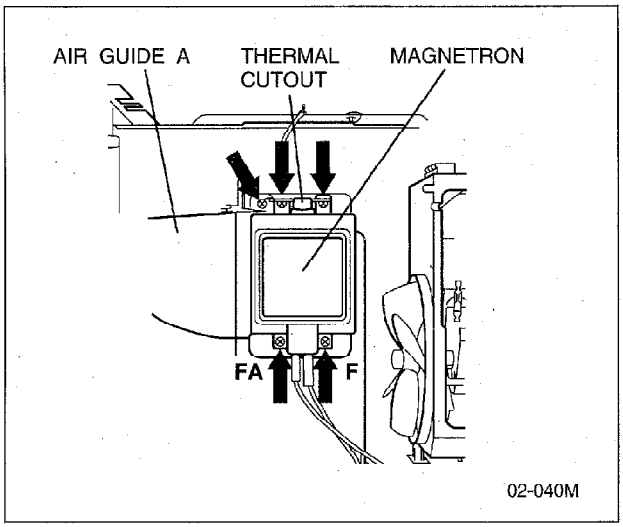
DISASSEMBLY AND PARTS REPLACEMENT PROCEDURE

1. Magnetron

(A) Discharge the high voltage capacitor.
(B) Remove 2 screws holding magnetron thermal cutout.
(C) Remove 1 screw holding air guide A.
(D) Disconnect 2 high voltage lead wires from magnetron filament terminals.
(E) Remove 4 screws holding the magnetron.

NOTE: After replacement of the magnetron, tighten mounting screws properly making sure there is no gap between the waveguide and the magnetron to prevent microwave leakage.

CAUTION
When replacing the magnetron, be sure the antenna gasket is in place.



2. Digital programmer circuit (DPC) and membrane key board.

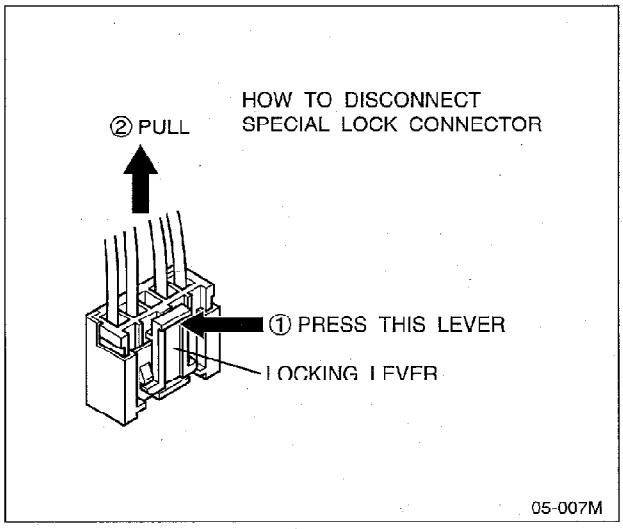
NOTE: Be sure to ground any static electric charge built up on your body, before handling the DPC.

(A) Disconnect all connectors from D.P.C.
(B) Remove 2 screws holding escutcheon base and slide the escutcheon base upward slightly.
(C) Release CN2 connector's lock of DPC by pushing both levers to inside and pull them upward, and remove flat cable of membrane key board.
(D) Remove 2 screws holding DPC.

To replace membrane key board

(E) Remove escutcheon bracket from escutcheon base by freeing 4 catch hooks on the escutcheon base.
(F) Peel off the tub of membrane key board from escutcheon base.
(G) Peel off the display filter from escutcheon base.
(H) Push the upper part of key board (display window portion) from back of escutcheon base and peel off escutcheon sheet and membrane key board completely from escutcheon base.

NOTE: 1. The membrane key board is attached to the escutcheon base with double faced adhesive tape. Therefore, applying hot air such as using of hair dryer is recommended for smoother removal.
2. When installing new membrane key board, make sure that the surface of escutcheon base is cleaned sufficiently so that any problems (shorted contacts or uneven surface) can be avoided.
3. Alignment position of membrane key board and escutcheon sheet are as follows (See figure); Membrane key board: Right and upper edges Escutcheon sheet: Right and lower edges



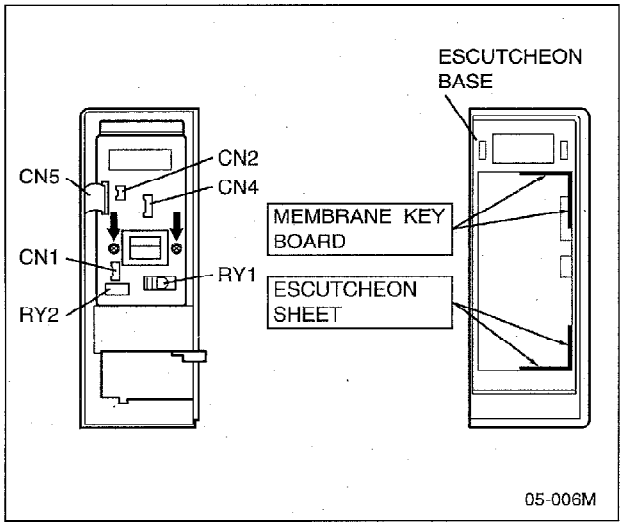
3. Low voltage transformer and/or power relays

NOTE: Be sure to ground any static electric charge built up on your body before handling the DPC.

(A) Using solder wick or a desoldering tool and 30W soldering iron, carefully remove all solder from the terminal pins of the low voltage transformer and/or power relays.

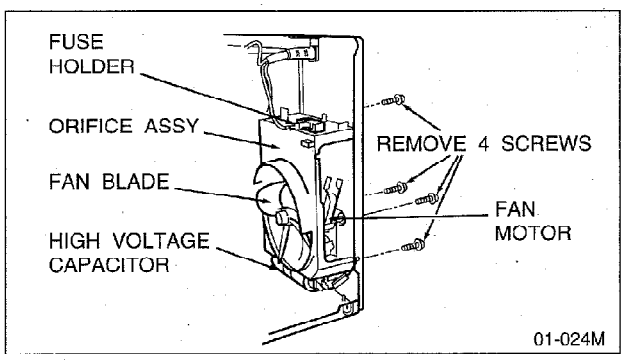
NOTE: Do not use a soldering iron or desoldering tool of more than 30 watts on DPC contacts.

(B) With all the terminal pins cleaned and separated from DPC contacts, remove the defective transformer/power relays and install new transformer/power relays making sure all terminal pins are inserted completely. Resolder all terminal contacts carefully.



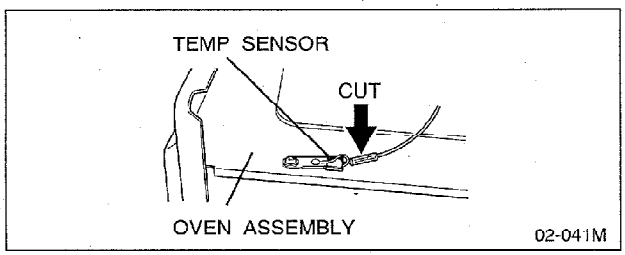
4. Fan motor

(A) Disconnect 2 lead wires from fan motor terminals.
(B) Disconnect 2 lead wires from fuse holder terminals.
(C) Disconnect 4 high voltage lead wires from high voltage capacitor terminals.
(D) Remove 4 screws holding fan motor and orifice assy and detach the orifice assy with fan motor from oven assy.
(E) Remove fan blade from the fan motor shaft by pulling it straight out.
(F) Separate the fan motor from the orifice assy by freeing 2 catch hooks on the orifice assy.



5. Temp sensor (thermal protector)

(A) Cut lead wire at the top of sensor terminals.
(B) Remove 1 screw holding the temp sensor and replace with new one.
(C) Solder the lead wires securely to the sensor terminals.

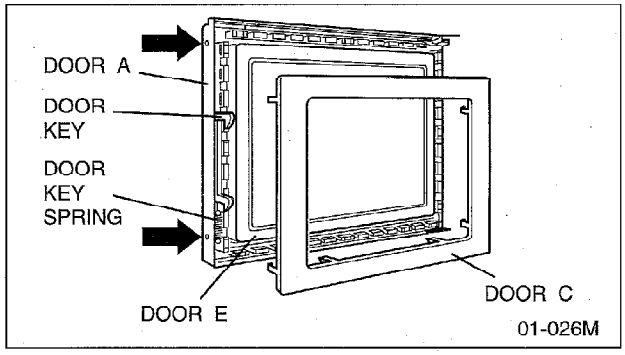


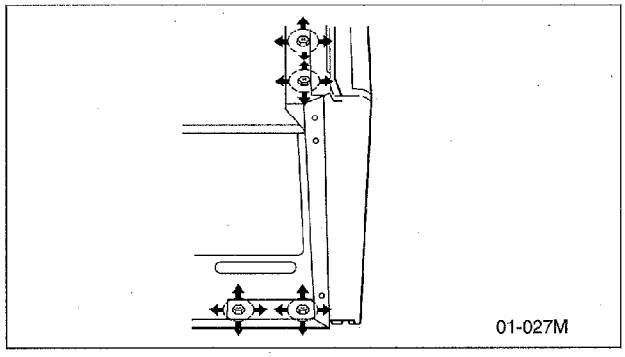
6. Door assembly

(A) Open the door and remove door C from door E by carefully pulling outward starting from upper right hand corner.
(B) Remove door key and door key spring.
(C) Remove 2 or 3 screws holding side and bottom frames of door A.
(D) Separate the door A from the door E by freeing catch hooks on the door A using a flat screwdriver.

After replacement of the defective component parts of the door, reassemble it and follow the instructions below for proper installation and adjustment so as to prevent an excessive microwave leakage.

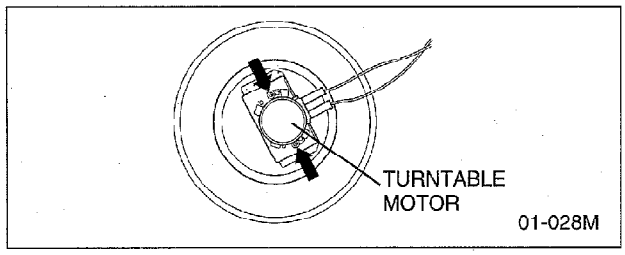
(1) When mounting the door to the oven, be sure to adjust the door parallel to the bottom line of the oven face plate by moving the upper hinge and lower hinge in the direction necessary for proper alignment.
(2) Adjust so that the door has no play between the inner door surface and oven front surface. If the door assembly is not mounted properly, microwave may leak from the clearance between the door and oven.





7. Turntable motor (Except NN-6＊＊5A)

(A) Remove 2 screws holding motor cover.
(B) Disconnect 2 lead wires from turntable motor.
(C) Remove 2 screws holding turntable motor.



7. Turntable motor (NN-6＊＊5A)

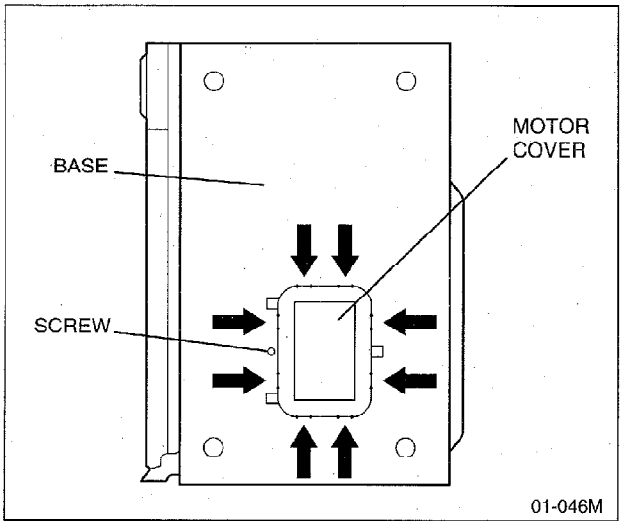
(A) Remove the motor cover by breaking off at the 8 spots indicated by arrows with a cutter or the like. (See Figure)

NOTE: After breaking off the motor cover, make sure that cut-off portions are properly trimmed off or bend to inside so that no sharp edge will expose to outside.

(B) Disconnect 2 lead wires connected to the stirrer motor.

(C) Remove the stirrer motor by removing 2 screws.

NOTE: To reinstall the motor cover, use 4×6 screw.



8. Steam sensor

(A) Remove 1 screw holding steam sensor unit.

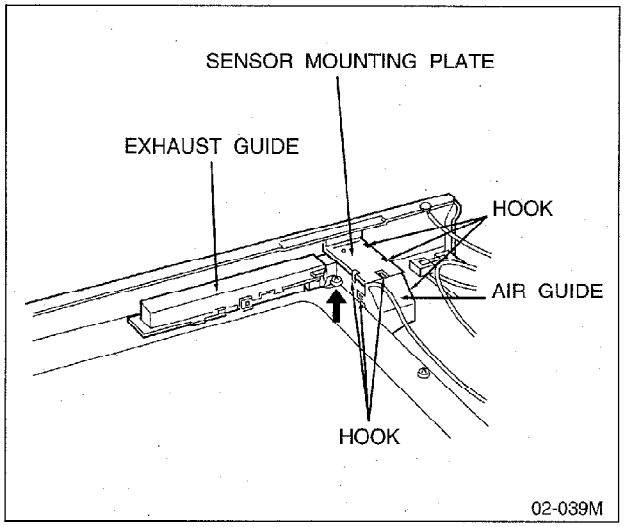
(B) Disconnect CN2 connector from digital programmer circuit board.

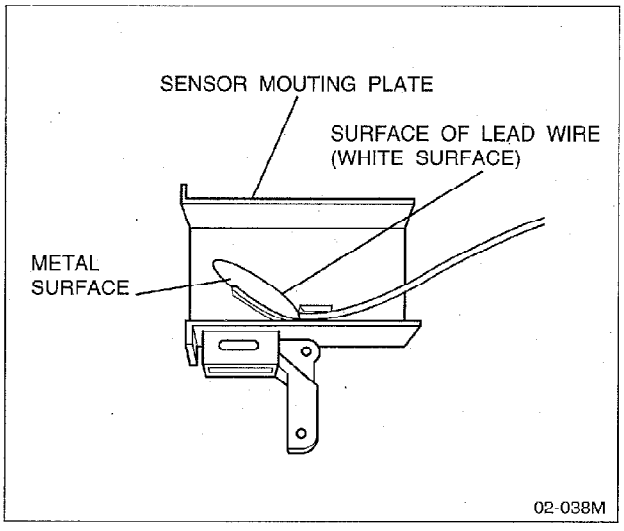
(C) Remove exhaust guide from steam sensor unit.

(D) Remove catch hooks on sensor mounting plate and air guide.

(E) Remove steam sensor from sensor mounting plate.

NOTE: When installing the steam sensor, make sure that the direction of steam sensor is as shown in figure.





COMPONENT TEST PROCEDURE

CAUTION

1. High voltage is present at the high voltage terminal of the high voltage transformer during any cook cycle.
2. It is neither necessary nor advisable to attempt measurement of the high voltage.
3. Before touching any oven components, or wiring, always unplug the oven from its power source and discharge the high voltage capacitor.

1. High voltage transformer

(A) Remove connections from the transformer terminals and check continuity.
(B) Normal (cold) resistance readings should be as follows:

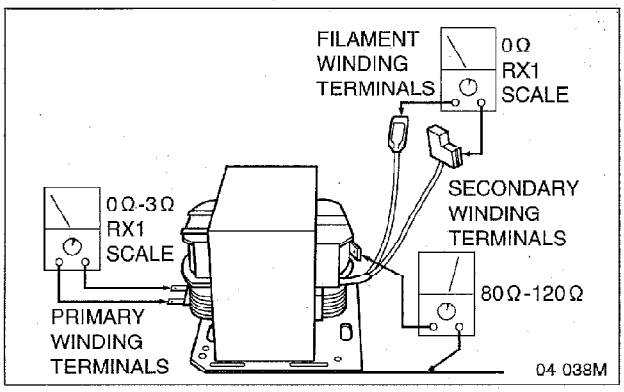
Secondary winding	Approx. 80Ω ~ 120Ω
Filament winding	Approx. 0Ω
Primary winding	Approx. 0Ω ~ 3Ω

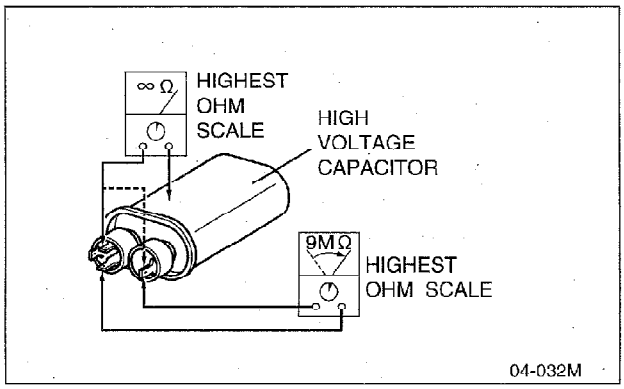
2. High voltage capacitor

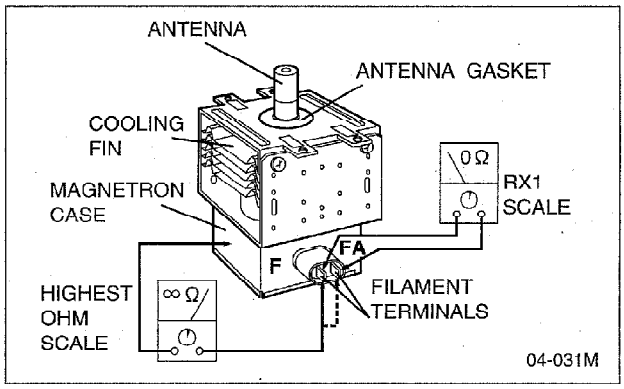
(A) Check continuity of capacitor with meter on highest OHM scale.
(B) A normal capacitor will show continuity for a short time, and then indicate 9MΩ once the capacitor is charged.
(C) A shorted capacitor will show continuous continuity.
(D) An open capacitor will show constant 9MΩ.
(E) Resistance between each terminal and chassis should be infinite.

3. Magnetron

Continuity checks can only indicate an open filament or a shorted magnetron. To diagnose for an open filament or shorted magnetron.
(A) Isolate magnetron from the circuit by disconnecting the leads.
(B) A continuity check across magnetron filament terminals should indicate one ohm or less.
(C) A continuity check between each filament terminal and magnetron case should read open.

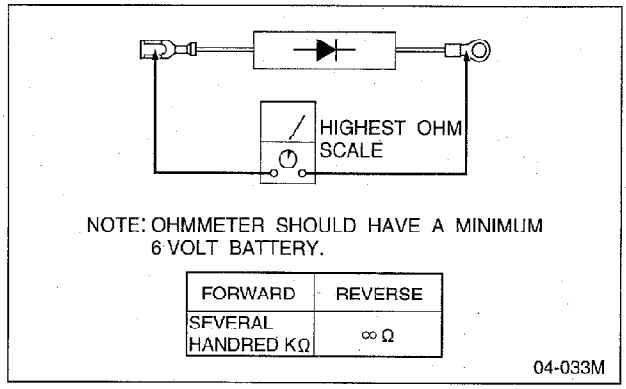






4. Diode

(A) Isolate the diode from the circuit by disconnecting the leads.
(B) With the ohmmeter set on the highest resistance scale, measure the resistance across the diode terminals. Reverse the meter leads and again observe the resistance reading. Meter with 6V, 9V or higher voltage batteries should be used to check the front-to-back resistance of the diode, otherwise an infinite resistance may be read in both directions.A normal diode's resistance will be infinite in one direction and several hundred kΩ in the other direction.

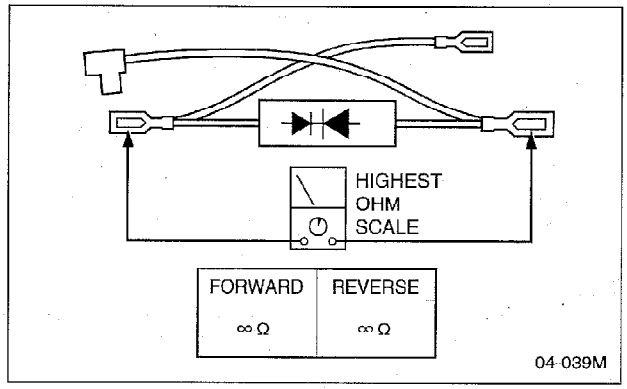


5. Membrane key board (Membrane switch assembly)

Check continuity between switch terminals, by tapping an appropriate pad on the key board. The contacts assignment of the respective pads on the key board is as shown in digital programmer circuit.

6. Protector diode

(A) Isolate the protector diode assembly from the circuit by disconnecting its leads.
(B) With the ohmmeter set on the highest resistance scale, measure the resistance across the protector diode terminals.
Reverse the meter leads and again observe the resistance reading.
A normal protector diode's resistance will be infinite in both directions.
It is faulty if it shows continuity in one or both directions.



7. Steam Sensor and digital programmer circuit

CAUTION

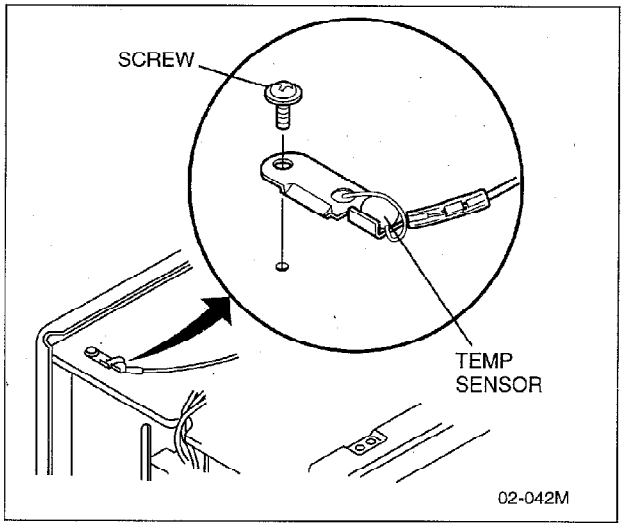
Do not touch any parts of the circuitry on the digital programmer circuit since static electric discharge may damage this control panel.
Always ground yourself while working on this panel to discharge any static charge built up on your body.

In order to determine if the steam sensor function of the digital programmer circuit is in working order or not, do the following test.
1) Place a water load (150 cc) in the oven.
2) Tap Sensor Reheat pad.
3) Tap Start Pad.
4) Steam Sensor detects steam about 1 minute 30 seconds to 4 minutes after the Start Pad is tapped.
5) T1 time cooking automatically switch to remaining time cooking. (T2)
6) The remaining of cooking time (T2) appears in display window. If the following cooking time appear Steam Sensor function is normal.

T1 TIME	T2 TIME (Remaining cooking time)
1Min. 30 sec. ~4 Min.	8 Sec. ~ 23 Sec.

8. Temp sensor (Thermal protector)

A temp sensor is mounted on top of the oven cavity at the left side. Its purpose is to automatically shut off the oven in case the cavity overheats for any reason.
The thermal protector will operate at 257°F (125°C).
The device is connected to the DPC on touch control models.
When the thermal protector exceeds its temperature it will turn off the power to oven cavity and display will go to reset mode.
The cooking program can be reset after cool-down.
THERMISTOR RESISTANCE VALUE
30K-120K at 10°C-30°C (50°F-86°F)



MEASUREMENTS AND ADJUSTMENTS

1. Adjustment of Primary latch switch, Secondary latch switch and short switch

(A) When mounting Primary latch switch, Secondary latch switch and short switch to door hook assembly, mount the Primary latch switch, the Secondary latch switch and the short switch to the door hook assembly as shown in table.

NOTE: No specific adjustment during installation of Primary latch switch, Secondary latch switch and short switch to the door hook is necessary.

(B) When mounting the door hook assembly to the oven assembly, adjust the door hook assembly by moving it in the direction of arrow in table so that the oven door will not have any play in it. Check for play in the door by pulling the door assembly. Make sure that the latch keys move smoothly after adjustment is completed. Completely tighten the screws holding the door hook assembly to the oven assembly.

(C) Reconnect the short switch and check the continuity of the monitor circuit and all latch switches again by following the components test procedures.

2. Measurement of microwave output

The output power of magnetron can be determined by performing IEC standard test procedures. However, due to the complexity of IEC test procedures, it is recommended to test the magnetron using the simple method outlined below.

Necessary Equipment:

*1 liter beaker *Glass thermometer

*Wrist watch or stopwatch

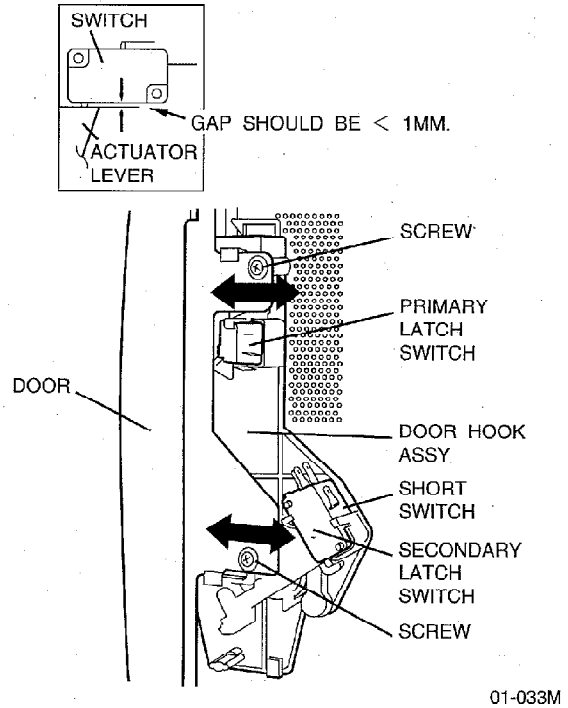
NOTE: Check the line voltage under load. Low voltage will lower the magnetron output. Take the temperature readings and heating time as accurate as possible.

(A) Fill the beaker with exactly one liter of tap water. Stir the water using the thermometer and record the beaker's temperature (recorded as T1).

(B) Place the beaker on the center of glass cook plate. Set the oven for High power and heat it for exactly one minute.

(C) Stir the water again and read the temperature of the beaker (recorded as T2).

(D) The normal temperature rise at High power position for each models is as shown in table.



01-033M

Please confirm that the gap between the switch housing and switch actuator levers is no more than 1.0mm when the door is closed.

TABLE (1 ℓ -1min. test)

RATED OUTPUT	TEMPERATURE RISE
800W (IEC-705)	Min. 7.0˚C
900W (IEC-705)	Min. 8.0˚C

TROUBLESHOOTING GUIDE

CAUTION

1. Check grounding before checking for trouble.
2. Be careful of the high voltage circuit.
3. Discharge high voltage capacitor.
4. When checking the continuity of the switches or the high voltage transformer, disconnect one lead wire from these parts and then check continuity with the AC plug removed. To do otherwise may result in a false reading or damage to your meter.
   When disconnecting a plastic connector from a terminal, you must hold the plastic connector instead of the lead wire and then disconnect it, otherwise lead wire may be open or the connector cannot by removed.
5. Do not touch any parts of the circuitry on the digital programmer circuit, since static electric discharge may damage this control panel.
   Always touch yourself to ground while working on this panel to discharge any static charge in your body.
6. A 220/230/240V AC is present at the shaded area ▒▒ of the digital programmer circuit (Terminals of power relay's and primary circuit of low voltage transformer). When troubleshooting, be cautious of possible electrical shock hazard.

First of all operate the microwave oven following the correct operating procedures in order to find the exact cause of any trouble.

[TROUBLE 1] Oven does not start cooking

	SYMPTOM	CAUSE	CORRECTIONS
1.	Oven is dead. Fuse is OK. No display and no operation at all.	1. Open or loose lead wire harness	
		2. Open thermal cutout (Magnetron)	Check fan motor when thermal cutout is defective.
		3. Open low voltage transformer 4. Defective DPC	
2.	Oven does not accept key input (Program)	1. Key input is not in-sequence	Refer to operation procedure.
		2. Open or loose connection of membrane key pad to DPC (Flat cable) 3. Shorted or open membrane key board	
		4. Defective DPC	Refer to DPC troubleshooting.
3.	Oven lamp and fan motor turn on when oven is plugged in with door closed.	1. Misalignment or loose wiring of secondary latch switch	Adjust door and latch switches.
		2. Defective secondary latch switch	
4.	Timer starts count down but no microwave oscillation.	1. Off-alignment of latch switches	Adjust door and latch switches.
		2. Defective primary latch switch 3. Open or loose wiring of power relay (RY1) 4. Defective power relay (RY1). 5. Defective DPC. 6. Open or loose connection of high voltage circuit especially magnetron filament circuit NOTE: Large contact resistance will bring lower magnetron filament voltage and causing magnetron to lower output and/or intermittent oscillation.	
		7. Defective high voltage component H.V. Transformer H.V. Capacitor H.V. Diode Magnetron	Check high voltage component according to component test procedure and replace if it is defective.

【TROUBLE 2】 Fuse is blown

	SYMPTOM	CAUSE	CORRECTIONS
1.	8A fuse is blown.	1. Shorted lead wire harness	
		2. Defective short switch	Check adjustment of latch switches and door
		3. Defective primary latch switch	
		4. Shorted H.V. Capacitor	
		5. Shorted H.V. Diode	Replace H.V. Diode and protector diode (*NOTE)
		6. Defective magnetron	Replace magnetron and protector diode (*NOTE)
		7. Shorted H.V. Transformer	Replace H.V.Transformer and protector diode (*NOTE)
		8. Shorted Protector diode	
	※NOTE: Be sure to replace protector diode together with those H.V.Components. In this case, only D2 of protector diode may be shorted due to faulty H.V.Component.Therefore, if protector diode is not replaced together, high voltage transformer will bedamaged (over heated).		

【TROUBLE 3】 Other troubles

	SYMPTOM	CAUSE	CORRECTIONS
1.	Microwave output is low. Oven takes longer time to cook food.	1. Decrease in power source voltage	Consult electrician
		2. Open or loose wiring of magnetron filament circuit. (Intermittent oscillation) 3. Aging change of magnetron	
2.	Fan motor and oven lamp turn on when door is opened.	1. Shorted primary latch switch	
3.	Oven does not operate and return to plugged in mode.	1. Open or loose wiring of temp sensor 2. Defective temp sensor	Check tighten screws on escutcheon base bracket, D.P.C. board and temp sensor.
		3. Defective DPC	Refer to DPC troubleshooting.
4.	Loud buzzing noise can be heard.	1. Loose fan and fan motor 2. Loose screws on H.V. Transformer	
5.	Oven stops operation during cooking	1. Off-alignment of latch switches	Adjust door and latch switches.
		2. Open or loose wiring of primary and secondary latch switch 3. Operation of thermal cutout (Magnetron)	
6.	Turntable motor does not rotate.	1. Open or loose wiring of turntable motor 2. Defective turntable motor	
7.	Oven return to plugged in mode after 10 seconds elapsed in the auto sensor cooking mode.	1. Open or loose wiring of sensor terminals from DPC. 2. Open steam sensor. 3. Defective D.P.C.	Sensor Models

Trouble related to Digital Programmer Circuit

SYMPTOM	STEP	CHECK	RESULT	CAUSE/CORRECTIONS
No display when oven is first plugged in	1	Fuse pattern of DPC	Normal	STEP 2
			Open (NOTE)	Shorted circuit of ZNR, L. V. T., Oven Lamp etc. Replace DPC
	2	Low voltage transformer (LVT) secondary voltage	Abnormal 0V	LVT
			Normal	→ Step 3
	3	IC-1 pin 1 voltage (Emitter of Q1)	Abnormal	ZD1,Q1
			Normal = 5V	→ Step 4
	4	IC-1 pin 27 voltage (14 pin of IC-2)	Abnormal	IC-2
			Normal	→ IC-1, CX1, DISPLAY

NOTE

Procedure of fuse pattern repairing is as follows:

1. When the fuse pattern (PF2) opens.

(1) Remove jumper wire (PF1).

(2) Insert the removed jumper wire (PF1) to "(PF2)" position and solder it. If both "PF1"and "PF2" fuse pattern are open, please replace DPC.

2. When the fuse pattern (PF4) opens.

(1) Remove jumper wire (PF3).

(2) Insert the removed jumper wire (PF3) to "(PF4)" position and solder it. If both "PF4" and "PF3" fuse pattern are open, please replace DPC.

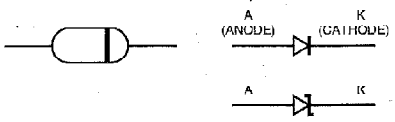
NOTE:* At the time of these repairs, make visual inspection of the varistor for burning damage and examine the transformer with tester for the presence of layer short-circuit (check primary coil resistance).
If any abnormal condition is detected, replace the defective parts.

No key input	1	Membrane switch continuity	Abnormal	Membrane switch
			Normal	IC-1
No beep sound	1	IC-1 pin 23 voltage	Abnormal	IC-1
			Normal	BZ, Q6
Power relay A(RY-2) does not turn on even though the program has been set and the start pad is tapped	1	IC-1 pin 8 voltage while operation	Abnormal	IC-1
			Normal=5V	→ Step 2
	2	short circuit between pin 1 and pin 12 of IC-2	Still not turn on	RY-2
			RY-2 turns on	IC-2
No microwave oscillation at any power setting	1	IC-1 pin 5 and pin 15 voltages while operation at high power	Abnormal	IC-1
			Normal 5---5V, 15---5V IC-1	→ Step 2
	2	Q2 transistor	Abnormal	Q2
			Normal	IC-2, RY-1
Dark or unclear display	1	Replace display and check operation	Normal	DISPLAY
			Abnormal	IC-1
Missing or lighting of unnecessary segment	1	Replace IC-1 and check operation	Normal	IC-1
			Abnormal	DISPLAY

TO BE CONTINUED FOR AUTO SENSOR MODELS				
Auto Sensor cooking does not operate normally. (Steam sensor does not detect steam from foods.)	1	Steam sensor terminal voltage by using high impedance tester (20kΩ/V), when breathe on metal surface of sensor	Abnormal = 0V	Steam sensor
			Normal ≧ 10~30mV	IC-1, IC-3

HOW TO CHECK THE SEMICONDUCTORS USING AN OHM METER

Diode



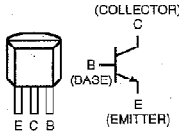
	FORWARD	REVERSE
A-K	SMALL	∞

Transistor

NPN Transistor

2SC·····

2SD·····

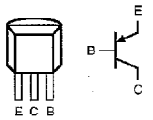


	FORWARD	REVERSE
B-E	SMALL	∞
B-C	SMALL	∞
C-E	∞	∞

PNP Transistor

2SA·····

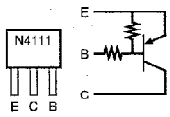
2SB·····



	FORWARD	REVERSE
B-E	SMALL	∞
C-B	SMALL	∞
C-E	∞	∞

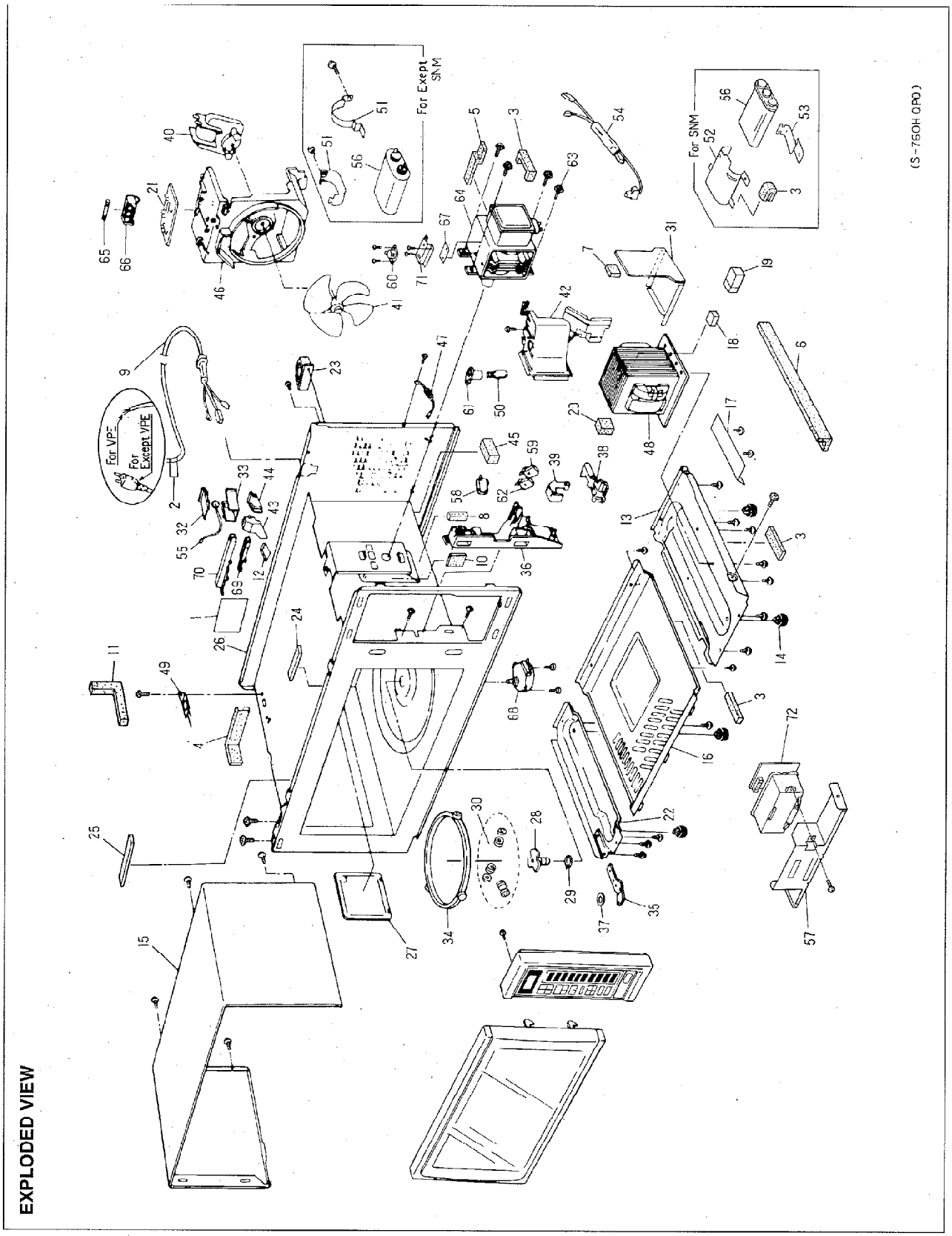
Digital Transistor

PNP Transistor



	FORWARD	REVERSE
E-B	10kΩ~30kΩ	10kΩ~30kΩ
C-B	50kΩ~90kΩ	∞
C-E	40kΩ~80kΩ	∞

EXPLODED VIEW AND PARTS LIST



PARTS LIST

NOTE 1: When ordering replacement part(s), please use part number(s) shown in this parts list.
Do not use description of the part.
2: Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.
3: Alphabet marks in Remarks colums (i.e. QPQ etc) indicate parts applicable to only specified country models as follows.

QPQ: For Australia, JPG: For New Zealand, VPE: For South Africa etc, KKE: For U. A. E., Egypt, Iran, KNQ: For Kuwait, Doha Qatar, Oman, Bahrain, Pakistan, SNM: Saudi Arabia

Parts without these marks can be used for all models.

Ref. No.		Part No.	Part Name & Description	Pcs/ Set	Remarks
1		A00065460JP	CAUTION LABEL	1	
2		ANE0239L00XN	CORD LABEL	1	NN-6455 VPE,NN-6755 KKE/KNQ/SNM/VPE, NN-7855 KKE/KNQ/SNM/VPE
3		ANE000Z000AA	CUSHION RUBBER A	1	NN-6405,NN-6455,NN-6705, NN-6755 QPQ/VPE,NN-6855, NN-7855 JPG/QPQ/VPE
3		ANE000Z000AA	CUSHION RUBBER A	2	NN-6755 KKE/KNQ,NN-7855 KKE/KNQ
3		ANE000Z000AA	CUSHION RUBBER A	3	NN-6755 SNM,NN-7855 SNM
4		ANE0902000DH	CUSHION RUBBER A	1	
5		ANE0902000DJ	CUSHION RUBBER A	1	NN-6455 JPG/VPE,NN-6705 JPG, NN-6755 VPE,NN-6855 JPG
6		ANE0902000DR	CUSHION RUBBER A	1	NN-7855
6		ANE0921000DN	CUSHION RUBBER C	1	NN-6405,NN-6455,NN-6705, NN-6755 KKE/KNQ/QPQ/VPE,NN-6855
7		ANE0902000ED	CUSHION RUBBER A	1	NN-6455 VPE,NN-6755 KKE/VPE, NN-7855 KKE/VPE
8		ANE0904000BD	CUSHION RUBBER A	1	NN-6405,NN-6455,NN-6705, NN-6755 KKE/KNQ/QPQ/VPE,NN-6855, NN-7855 JPG/KKE/KNQ/QPQ/VPE
9	⚠	A900C6210QP	AC CORD W/PLUG	1	NN-6405,NN-6455 QPQ,NN-6705 QPQ, NN-6755 QPQ,NN-6855 QPQ,NN-7855 QPQ (240V)
9	⚠	A900C5500JP	AC CORD W/PLUG	1	NN-6455 JPG,NN-6705 JPG,NN-6855 JPG, NN-7855 JPG (220V)
9	⚠	A900C4760MK	AC CORD W/PLUG	1	NN-6755 KKE/KNQ/SNM,NN-7855 KKE/KNQ/SNM (220V)
9	⚠	A90245500VN	AC CORD W/OUT PLUG	1	NN-6455 VPE,NN-6755 VPE,NN-7855 VPE (220V)
10		A09225500AP	CUSHION RUBBER C	1	NN-7855,NN-6705,NN-6755 QPQ/VPE,NN-6855
11		ANE0926000AM	CUSHION RUBBER	1	NN-7855
12		ANE0928000BD	CUSHION RUBBER	1	NN-6705,NN-6755 QPQ/VPE,NN-6855,NN-7855
13		A10015540AP	BASE	1	NN-6405,NN-6455,NN-6705, NN-6755 KKE/KNQ/QPQ/VPE,NN-6855, NN-7855 JPG/KKE/KNQ/QPQ/VPE

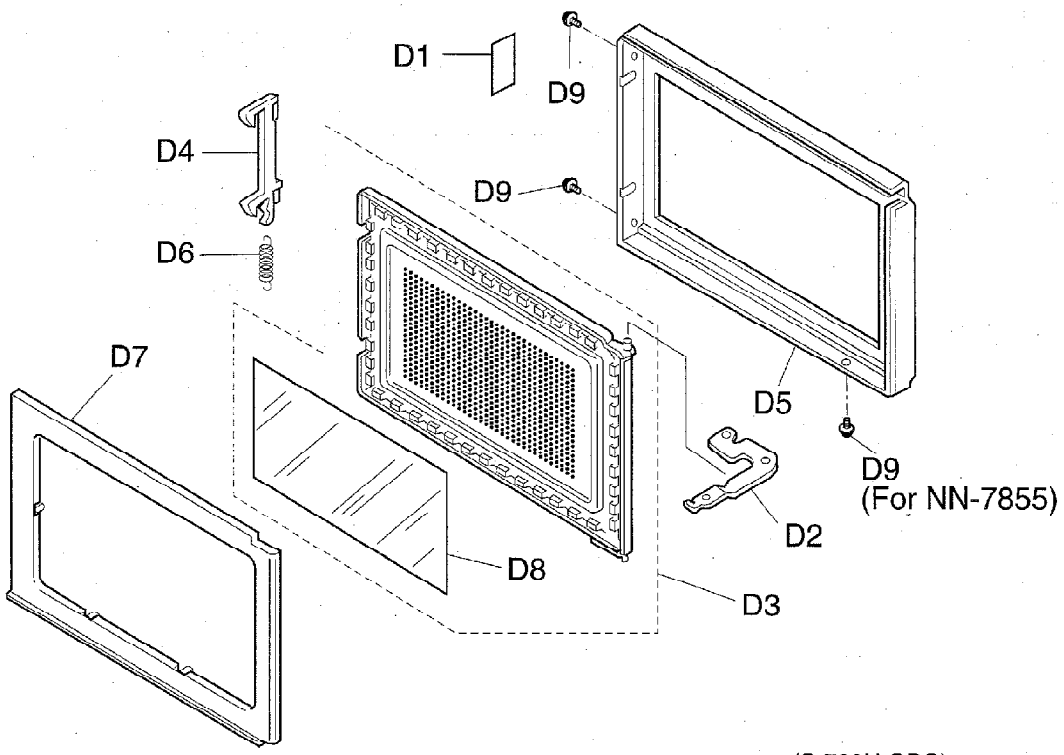
Ref. No.		Part No.	Part Name & Description	Pcs/ Set	Remarks
14		ANE1008-3W0	RUBBER FOOT	4	
15		A10096250GQP	CABINET BODY (U)	1	NN-6405,NN-6705
15		A10096240HQP	CABINET BODY (U)	1	NN-6455, NN-6755 KKE/KNQ/QPQ/VPE,NN-6855
15		A10097080HSN	CABINET BODY (U)	1	NN-6755 SNM
15		A10096210HQP	CABINET BODY (U)	1	NN-7855 JPG/KKE/KNQ/QPQ/VPE
15		A10097000HSN	CABINET BODY (U)	1	NN-7855 SNM
16		A10265540AP	BASE C	1	NN-6405,NN-6455,NN-6705,NN-6755,NN-6855
16		A10264000AP	BASE C	1	NN-7855
17		A10405500HN	REINFORCE BRACKET	1	NN-6755 KKE/KNQ
17		A10405630PP	REINFORCE BRACKET	1	NN-7855 KKE/KNQ/SNM
17		A10517080SN	REINFORCE BRACKET B	1	NN-6755 SNM
18		ANE10496P0GS	CUSHION RUBBER	1	NN-6455 VPE,NN-6755 KKE/VPE, NN-7855 KKE/VPE
19		A10495500SN	CUSHION RUBBER	1	NN-7855 SNM
20		A10495630SN	CUSHION RUBBER	1	NN-6755 SNM
21		A692Y4060BP	NOISE FILTER (U)	1	NN-7855 JPG/VPE
21		A692Y5540BP	NOISE FILTER(U)	1	NN-6455 JPG/VPE,NN-6705 JPG, NN-6755 VPE,NN-6855 JPG
22		A11295540AP	BASE B	1	NN-6405,NN-6455,NN-6705, NN-6755 KKE/KNQ/QPQ/VPE, NN-6855,NN-7855 JPG/KKE/KNQ/QPQ/VPE
22		A11294000AP	BASE B	1	NN-6755 SNM,NN-7855 SNM
23		A11407000AP	STOPPER	1	
24		A11747050AP	SPACER A	1	NN-6405,NN-6455,NN-6705,NN-6755,NN-6855
25		A11747070AP	SPACER B	1	NN-6405,NN-6455,NN-6705,NN-6755,NN-6855
26	⚠	A200A7080AP	OVEN	1	NN-6405,NN-6455
26	⚠	A200A7060AP	OVEN	1	NN-6705,NN-6755 QPQ/VPE/KKE/KNQ,NN-6855
26	⚠	A200A7060SN	OVEN	1	NN-6755 SNM
26	⚠	A200A6220JP	OVEN	1	NN-7855 JPG/KKE/KNQ/QPQ/VPE
26	⚠	A200A7000SN	OVEN	1	NN-7855 SNM
27		A2055-1000	COVER	1	
28		A21315540AP	PULLEY SHAFT	1	NN-6405,NN-6455,NN-6705,NN-6755,NN-6855
28		A21315180AP	PULLEY SHAFT	1	NN-7855
29		ANE2177-F80	WASHER	1	
30		A202K5850AP	ROLLER B (U)	1	(NOTE 4)
31		A21874760JP	SHIELD PLATE	1	NN-6455 VPE,NN-6755 KKE/VPE, NN-7855 KKE/VPE
32		A22135540AP	SENSOR BRACKET A	1	NN-6705,NN-6755,NN-6855,NN-7855
33		A22145540AP	SENSOR BRACKET B	1	NN-6705,NN-6755,NN-6855,NN-7855
34		A290D5850GP	ROLLER RING (U)	1	
35	⚠	A30077050AP	LOWER HINGE	1	NN-6405,NN-6455,NN-6705,NN-6755,NN-6855

Ref. No.		Part No.	Part Name & Description	Pcs/ Set	Remarks
35	⚠	A30075180AP	LOWER HINGE	1	NN-7855
36	⚠	A30204310AG	DOOR HOOK	1	
37		ANE3081B60AP	DOOR HINGE SPACER	1	NN-7855
38		A31374650AP	HOOK SPACER B	1	
39		A31384650AP	HOOK SPACER C	1	
40		A400A5500QP	FAN MOTOR	1	(AC,24.8W,SINGLE)
41		ANE40086W0AP	FAN	1	
42		A40254760JP	AIR GUIDE A	1	NN-6405,NN-6455,NN-6705, NN-6755 KKE/KNQ/QPQ/VPE,NN-6855, NN-7855 JPG/KKE/KNQ/QPQ/VPE
42		A40254660AP	AIR GUIDE A	1	NN-6755 SNM,NN-7855 SNM
43		A40265540AP	AIR GUIDE B	1	NN-6705,NN-6755,NN-6855
43		A40265500AP	AIR GUIDE B	1	NN-7855
44		A40315540AP	AIR GUIDE C	1	NN-6705,NN-6755,NN-6855
44		A40315500AP	AIR GUIDE C	1	NN-7855
45		A41024760JP	AIR GUIDE CUSHION	1	NN-7855 JPG/KKE/KNQ/QPQ/VPE
46		A41445540AP	ORIFICE	1	NN-6405,NN-6455,NN-6705,NN-6755,NN-6855
46		A41444000AP	ORIFICE	1	NN-7855
47	⚠	A600A4690PP	DIODE	1	NN-6755 SNM,NN-7855 SNM
47	⚠	A62024000AP	DIODE,SI	1	NN-6405,NN-6455,NN-6705, NN-6755 KKE/KNQ/QPQ/VPE,NN-6855, NN-7855 JPG/KKE/KNQ/QPQ/VPE HVR-1X-3AA
48	⚠	A600B4760JP	H.V.TRANSFORMER	1	NN-6405,NN-6455 JPG/QPQ,NN-6705, NN-6755 KNQ/QPQ,NN-6855, NN-7855 JPG/KNQ/QPQ (1.5KVA)
48	⚠	A600B5540HN	H.V.TRANSFORMER	1	NN-6455 VPE,NN-6755 KKE/VPE, NN-7855 KKE/VPE (1.7KVA)
48	⚠	A600B5500SN	H.V.TRANSFORMER	1	NN-6755 SNM,NN-7855 SNM (1.6KVA)
49		A601L5180AP	TEMP SENSOR	1	
50		A60304080BP	INCANDESCENT LAMP	1	
51		A60374740AP	CAPACITOR BRACKET	1	NN-6405,NN-6455,NN-6705, NN-6755 KKE/KNQ/QPQ/VPE,NN-6855
51		A61884060AP	CAPACITOR BRACKET	1	NN-7855 JPG/KKE/KNQ/QPQ/VPE
52		A60375630PP	CAPACITOR BRACKET A	1	NN-6755 SNM,NN-7855 SNM
53		A60385630PP	CAPACITOR BRACKET B	1	NN-6755 SNM,NN-7855 SNM
54		A606V4760JP	PROTECTOR DIODE	1	NN-6405,NN-6455,NN-6705, NN-6755 KKE/KNQ/QPQ/VPE,NN-6855, NN-7855 JPG/KKE/KNQ/QPQ/VPE
54		A606V7600SN	PROTECTOR DIODE	1	NN-6755 SNM,NN-7855 SNM
55		A607S7050AP	STEAM SENSOR	1	NN-6705,NN-6755,NN-6855,NN-7855

Ref. No.		Part No.	Part Name & Description	Pcs/ Set	Remarks
56	⚠	A60904080GP	H.V.CAPACITOR	1	NN-6405,NN-6455,NN-6705, NN-6755 KKE/KNQ/QPQ/VPE,NN-6855, NN-7855 JPG/KKE/KNQ/QPQ/VPE (1.14 μF,AC2100V
56	⚠	A60904650PP	H.V.CAPACITOR	1	NN-6755 SNM,NN-7855 SNM (1.14 μF,AC2100V)
57		A61157600SN	POWER RELAY BRACKET	1	NN-6755 SNM,NN-7855 SNM
58	⚠	ANE6142-F60	MICROSWITCH	1	(V-15G-3C26) PRIMARY LATCH SWITCH
59	⚠	A61425180AP	MICROSWITCH	1	(L-3C2-2) SECONDARY LATCH SWITCH
60	⚠	A61456240QP	THERMAL CUTOUT	1	
61	⚠	A61524000AP	SOCKET	1	
62	⚠	A61785180AP	MICRO SWITCH	1	(L-2C2-2) SHORT SWITCH
63		XTWANE4−10RU	SCREW	4	3X8 (FOR MAGNETRON)
64	⚠	2M210-M1E	MAGNETRON	1	
65	⚠	ANE6230Z70BP	FUSE	1	(8A)
66		A62314000AP	FUSE HOLDER	1	NN-6405,NN-6455 QPQ,NN-6705 QPQ, NN-6755 KKE/KNQ/QPQ/SNM, NN-6855 QPQ,NN-7855 KKE/KNQ/QPQ/SNM
67		A62384650AP	SPACER	1	NN-7855 JPG/KKE/KNQ/QPQ/VPE
67		A62384310AG	SPACER	1	NN-7855 SNM
68		A63264760JP	TURNTABLE MOTOR	1	(3W)
69		A64505540AP	EXHAUST GUIDE B	1	NN-6705,NN-6755,NN-6855
69		A64505500AP	EXHAUST GUIDE B	1	NN-7855
70		A65435540AP	EXHAUST GUIDE C	1	NN-6705,NN-6755,NN-6855
70		A65435500AP	EXHAUST GUIDE C	1	NN-7855
71		A66267050CP	INSTALLATION PLATE	1	NN-6405,NN-6455,NN-6705,NN-6755,NN-6855
72		A691X7600SN	POWER RELAY	1	NN-6755 SNM,NN-7855 SNM
		A08877050AP	CABITY SPRAY PAINT	1	Spray can, For repair of painted oven cabity
		A08877000AP	TOUCH-UP PAINT	1	Bottle with brush, For repair of painted oven cabity

NOTE 4: When ordering the roller B assy, three rollers will be shipped.
When replacing the roller B, three rollers should be replaced at the same time.
Otherwise the glass cooking tray may not turn smoothly.

DOOR ASSEMBLY

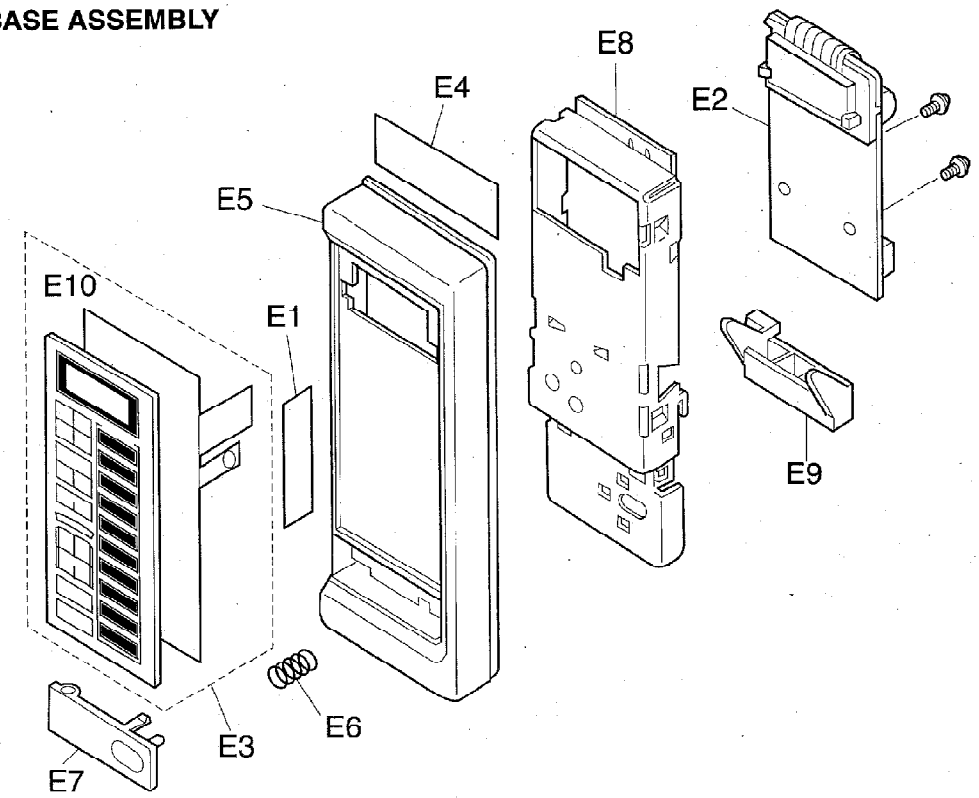


(S-760H QPQ)

Ref. No.		Part No.	Part Name & Description	Pcs/ Set	Remarks
D1		A01726210JP	CAUTION LABEL	1	NN-6455 JPG,NN-6705 JPG,NN-6855 JPG, NN-7855 JPG
D2	⚠	A30067050AP	UPPER HINGE	1	NN-6405,NN-6455,NN-6705,NN-6755,NN-6855
D2	⚠	A30065000AP	UPPER HINGE	1	NN-7855
D3	⚠	A302K7050QP	DOOR E (U)	1	NN-6405
D3	⚠	A302K7080HAP	DOOR E (U)	1	NN-6455,NN-6755 QPQ/VPE,NN-6855
D3	⚠	A302K7050AP	DOOR E (U)	1	NN-6705,NN-6755 KKE/KNQ/SNM
D3	⚠	A302K5180HAP	DOOR E (U)	1	NN-7855 JPG/QPQ/VPE
D3	⚠	A302K5180AP	DOOR E (U)	1	NN-7855 KKE/KNQ/SNM
D4		A30184650AP	DOOR KEY	1	
D5	⚠	A302A7070AP	DOOR A (U)	1	NN-6405
D5	⚠	A302A7080HAP	DOOR A (U)	1	NN-6455
D5	⚠	A302A7050AP	DOOR A (U)	1	NN-6705
D5	⚠	A302A7060HHN	DOOR A (U)	1	NN-6755 KKE/KNQ/SNM
D5	⚠	A302A7050HQP	DOOR A (U)	1	NN-6755 QPQ/VPE,NN-6855
D5	⚠	A302A7000HQP	DOOR A (U)	1	NN-7855 JPG/QPQ/VPE
D5	⚠	A302A7000HKN	DOOE A (U)	1	NN-7855 KKE/KNQ/SNM
D6		A30214000AP	DOOR KEY SPRING	1	
D7	⚠	A30857050AP	DOOR C	1	NN-6405,NN-6705,NN-6755 KKE/KNQ/SNM

Ref. No.		Part No.	Part Name & Description	Pcs/ Set	Remarks
D7	⚠	A30857080HAP	DOOR C	1	NN-6455,NN-6755 QPQ/VPE,NN-6855
D7	⚠	A30857000HQP	DOOR C	1	NN-7855 JPG/QPQ/VPE
D7	⚠	A30857010AP	DOOR C	1	NN-7855 KKE/KNQ/SNM
D8	⚠	A31457050AP	DOOR SCREEN A	1	NN-6405,NN-6455,NN-6705,NN-6755,NN-6855
D8	⚠	A31455180AP	DOOR SCREEN A	1	NN-7855
D9		XTBANE3+8BZ	SCREW	2	NN-6405,NN-6705 3X8
D9		XTBANE3+8BC	SCREW	2	NN-6455,NN-6755,NN-6855 3X8
D9		XTBANE3+8BC	SCREW	3	NN-7855 3X8

ESCUTCHEON BASE ASSEMBLY



(S-760H QPQ)

Ref. No.		Part No.	Part Name & Description	Pcs/ Set	Remarks
E1		A00077950QP	NAME PLATE	1	NN-6405
E1		A00077950HJP	NAME PLATE	1	NN-6455 JPG
E1		A00077950HQP	NAME PLATE	1	NN-6455 QPQ
E1		A00077730HVP	NAME PLATE	1	NN-6455 VPE
E1		A00077680JP	NAME PLATE	1	NN-6705 JPG
E1		A00077680QP	NAME PLATE	1	NN-6705 QPQ
E1		A00077680HKK	NAME PLATE	1	NN-6755 KKE
E1		A00077680HKN	NAME PLATE	1	NN-6755 KNQ
E1		A00077680HQP	NAME PLATE	1	NN-6755 QPQ
E1		A00077680HSN	NAME PLATE	1	NN-6755 SNM
E1		A00077680HVP	NAME PLATE	1	NN-6755 VPE
E1		A00077640HJP	NAME PLATE	1	NN-6855 JPG
E1		A00077640HQP	NAME PLATE	1	NN-6855 QPQ
E1		A00077600HJP	NAME PLATE	1	NN-7855 JPG
E1		A00077600HKK	NAME PLATE	1	NN-7855 KKE
E1		A00077600HKN	NAME PLATE	1	NN-7855 KNQ
E1		A00077600HQP	NAME PLATE	1	NN-7855 QPQ
E1		A00077600HSN	NAME PLATE	1	NN-7855 SNM
E1		A00077600HVP	NAME PLATE	1	NN-7855 VPE
E2		A603L7950QP	D.P.CIRCUIT (U)	1	NN-6405,NN-6455 QPQ RTL (W/COMPONENT)
E2		A603L7950JP	D.P.CIRCUIT (U)	1	NN-6455 JPG RTL (W/COMPONENT)
E2		A603L7950VP	D.P.CIRCUIT (U)	1	NN-6455 VPE RTL (W/COMPONENT)

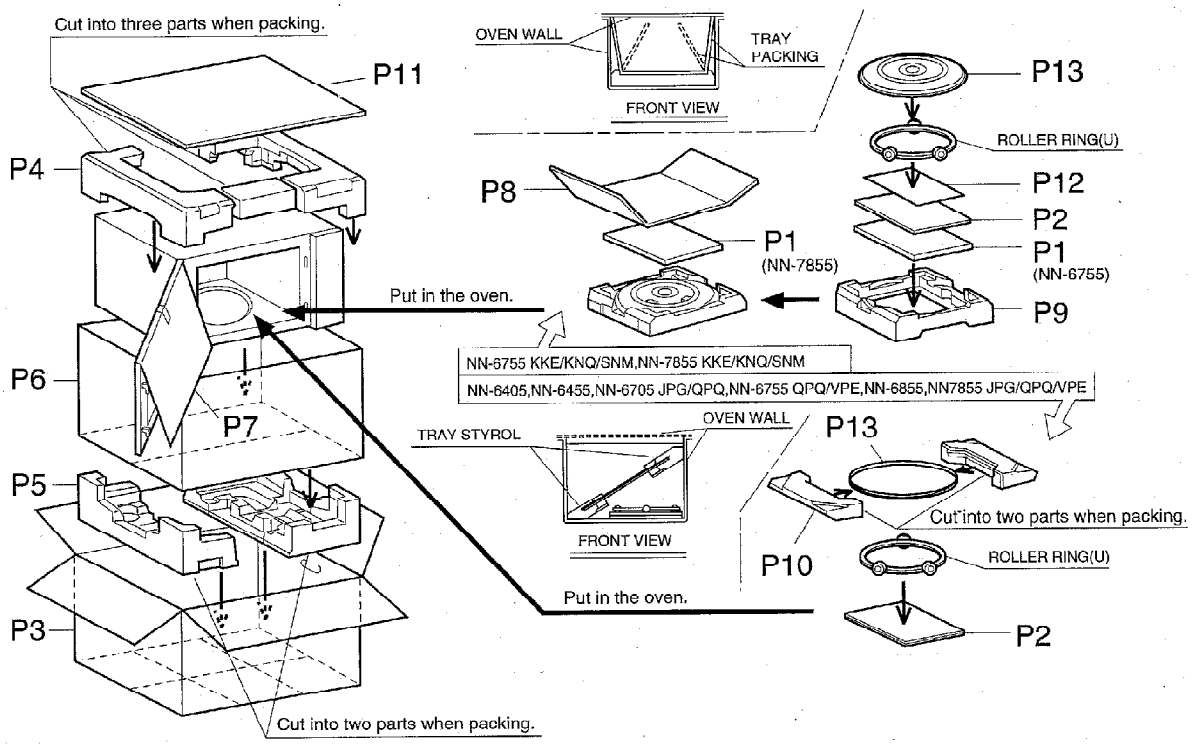
(S-760H QPQ)

Ref. No.		Part No.	Part Name & Description	Pcs/ Set	Remarks
E2		A603L7680JP	D.P.CIRCUIT (U)	1	NN-6705 JPG RTL (W/COMPONENT)
E2		A603L7680QP	D.P.CIRCUIT (U)	1	NN-6705 QPQ,NN-6755 QPQ RTL (W/COMPONENT)
E2		A603L7680KK	D.P.CIRCUIT (U)	1	NN-6755 KKE RTL (W/COMPONENT)
E2		A603L7680KN	D.P.CIRCUIT (U)	1	NN-6755 KNQ RTL (W/COMPONENT)
E2		A603L7680SN	D.P.CIRCUIT (U)	1	NN-6755 SNM RTL (W/COMPONENT)
E2		A603L7680VP	D.P.CIRCUIT (U)	1	NN-6755 VPE RTL (W/COMPONENT)
E2		A603L7640JP	D.P.CIRCUIT (U)	1	NN-6855 JPG RTL (W/COMPONENT)
E2		A603L7640QP	D.P.CIRCUIT (U)	1	NN-6855 QPQ RTL (W/COMPONENT)
E2		A603L7600JP	D.P.CIRCUIT (U)	1	NN-7855 JPG RTL (W/COMPONENT)
E2		A603L7600KK	D.P.CIRCUIT (U)	1	NN-7855 KKE RTL (W/COMPONENT)
E2		A603L7600KN	D.P.CIRCUIT (U)	1	NN-7855 KNQ RTL (W/COMPONENT)
E2		A603L7600QP	D.P.CIRCUIT (U)	1	NN-7855 QPQ RTL (W/COMPONENT)
E2		A603L7600SN	D.P.CIRCUIT (U)	1	NN-7855 SNM RTL (W/COMPONENT)
E2		A603L7600VP	D.P.CIRCUIT (U)	1	NN-7855 VPE RTL (W/COMPONENT)
E3		A630Y7950QP	MEMBRANE SWITCH (U)	1	NN-6405 (W/ESCUTCHEON SHEET)
E3		A630Y7950HQP	MEMBRANE SWITCH (U)	1	NN-6455 (W/ESCUTCHEON SHEET)
E3		A630Y7680QP	MEMBRANE SWITCH (U)	1	NN-6705 (W/ESCUTCHEON SHEET)
E3		A630Y7680HKN	MEMBRANE SWITCH (U)	1	NN-6755 KKE/KNQ/SNM (W/ESCUTCHEON SHET)
E3		A630Y7680HQP	MEMBRANE SWITCH (U)	1	NN-6755 QPQ/VPE (W/ESCUTCHEON SHEET)
E3		A630Y7640HQP	MEMBRANE SWITCH (U)	1	NN-6855 (W/ESCUTCHEON SHEET)
E3		A630Y7600HQP	MEMBRANE SWITCH (U)	1	NN-7855 JPG/QPQ/VPE (W/ESCUTCHEON SHEET)
E3		A630Y7600HKN	MEMBARNE SWITCH (U)	1	NN-7855 KKE/KNQ/SNM (W/ESCURCHEON SHEET)
E4		A80025540AP	ESCUTCHEON B	1	
E5		A80347050AP	ESCUTCHEON BASE	1	NN-6405,NN-6705 (NOTE 5)
E5		A80347080HAP	ESCUTCHEON BASE	1	NN-6455,NN-6755,NN-6855 (NOTE 5)
E5		A80347010HAP	ESCUTCHEON BASE	1	NN-7855 (NOTE 5)
E6		ANE80378A0AG	COOK BUTTON SPRING	1	
E7		A80727010AP	DOOR OPENING BUTTON	1	NN-6405,NN-6705
E7		A80727010HAP	DOOR OPENING BUTTON	1	NN-6455,NN-6755,NN-6855,NN-7855
E8		A81277050AP	BACK PANEL	1	NN-6405,NN-6455,NN-6705,NN-6755,NN-6855
E8		A81277010AP	BACK PANEL	1	NN-7855
E9		A82567010AP	DOOR OPENING LEVER	1	
E10		A83377950QP	ESCUTCHEON SHEET	1	NN-6405
E10		A83377950HQP	ESCUTCHEON SHEET	1	NN-6455
E10		A83377680QP	ESCUTCHEON SHEET	1	NN-6705
E10		A83377680HKN	ESCUTCHEON SHEET	1	NN-6755 KKE/KNQ/SNM
E10		A83377680HQP	ESCUTCHEON SHEET	1	NN-6755 QPQ/VPE
E10		A83377640HQP	ESCUTCHEON SHEET	1	NN-6855
E10		A83377600HQP	ESCUTCHEON SHEET	1	NN-7855 JPG/QPQ/VPE
E10		A83377600HKN	ESCUTCHEON SHEET	1	NN-7855 KKE/KNQ/SNM

NOTE 5: Please order name plate together.

(E-760H QPQ)

PACKING AND ACCESORIES

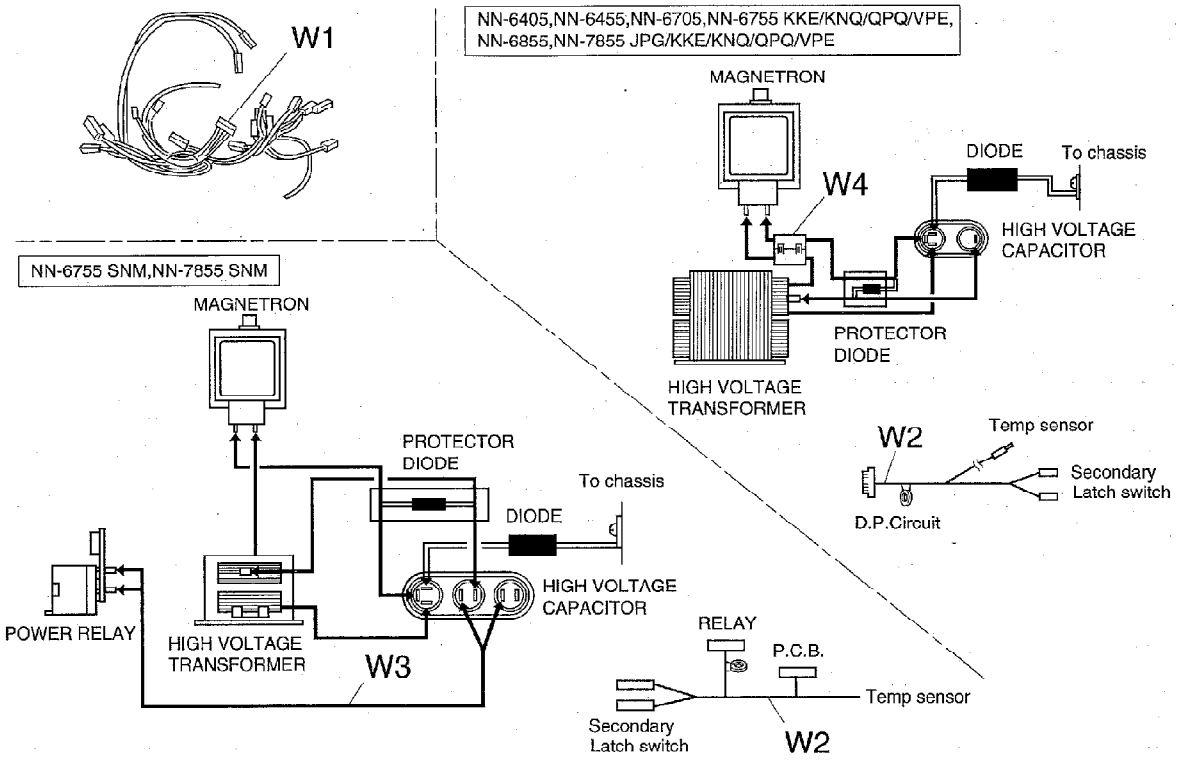


(S-760H QPQ)

Ref. No.		Part No.	Part Name & Description	Pcs/ Set	Remarks
P1		A000B5820KN	COOK BOOK	1	NN-6755 KKE/KNQ/SNM, NN-7855 KKE/KNQ/SNM
P2		A00037600QP	INSTRUCTION BOOK	1	NN-6405,NN-6455,NN-6705,NN-6755 QPQ/VPE, NN-6855,NN-7855 JPG/QPQ/VPE
P2		A00037600KN	INSTRUCTION BOOK	1	NN-6755 KKE/KNQ/SNM,NN-7855 KKE/KNQ/SNM
P3		A01027950QP	PACKING CASE,PAPER	1	NN-6405
P3		A01027950HJP	PACKING CASE,PAPER	1	NN-6455 JPG
P3		A01027950HQP	PACKING CASE,PAPER	1	NN-6455 QPQ
P3		A01027730HVP	PACKING CASE,PAPER	1	NN-6455 VPE
P3		A01027680JP	PACKING CASE,PAPER	1	NN-6705 JPG
P3		A01027680QP	PACKING CASE,PAPER	1	NN-6705 QPQ
P3		A01027680HKK	PACKING CASE,PAPER	1	NN-6755 KKE
P3		A01027680HKN	PACKING CASE,PAPER	1	NN-6755 KNQ
P3		A01027680HQP	PACKING CASE,PAPER	1	NN-6755 QPQ
P3		A01027680HSN	PACKING CASE,PAPER	1	NN-6755 SNM
P3		A01027640HJP	PACKING CASE,PAPER	1	NN-6855 JPG
P3		A01027640HQP	PACKING CASE,PAPER	1	NN-6855 QPQ
P3		A01027600HJP	PACKING CASE,PAPER	1	NN-7855 JPG
P3		A01027600HKK	PACKING CASE,PAPER	1	NN-7855 KKE
P3		A01027600HKN	PACKING CASE,PAPER	1	NN-7855 KNQ

Ref. No.		Part No.	Part Name & Description	Pcs/ Set	Remarks
P3		A01027600HQP	PACKING CASE,PAPER	1	NN-7855 QPQ
P3		A01027600HSN	PACKING CASE,PAPER	1	NN-7855 SNM
P3		A01027600HVP	PACKING CASE,PAPER	1	NN-7855 VPE
P4		A01047080AP	UPPER FILLER	1	NN-6405,NN-6455,NN-6705,NN-6755 QPQ/VPE, NN-6855
P4		A01047050KN	UPPER FILLER	1	NN-6755 KKE/KNQ/SNM
P4		A01045500AP	UPPER FILLER	1	NN-7855 JPG/QPQ/VPE
P4		A01044760KN	UPPER FILLER	1	NN-7855 KKE/KNQ/SNM
P5		A01057080AP	LOWER FILLER	1	NN-6405,NN-6455,NN-6705, NN-6755 QPQ/VPE,NN-6855
P5		A01057050KN	LOWER FILLER	1	NN-6755 KKE/KNQ/SNM
P5		A01055500AP	LOWER FILLER	1	NN-7855 JPG/QPQ/VPE
P5		A01054760KN	LOWER FILLER	1	NN-7855 KKE/KNQ/SNM
P6		A01065200AP	VINYL COVER	1	
P7		A01075240AP	DOOR SHEET	1	NN-6405,NN-6455,NN-6705,NN-6755,NN-6855
P7		ANE0107580AP	DOOR SHEET	1	NN-7855
P8		A01085500HN	TRAY PACKING	1	NN-7855 KKE/KNQ/SNM
P8		A01085630KN	TRAY STYROL	1	NN-6755 KKE/KNQ/SNM
P9		A01134790AP	TRAY STYROL	1	NN-6755 KKE/KNQ/SNM
P9		A01134000AP	TRAY STYROL	1	NN-7855 KKE/KNQ/SNM
P10		A01134740AP	TRAY STYROL	1	NN-6405,NN-6455,NN-6705, NN-6755 QPQ/VPE,NN-6855
P10		A01134650AP	TRAY STYROL	1	NN-7855 JPG/QPQ/VPE
P11		A01264760ZP	REINFORCE MATERIAL	1	NN-6755 KKE/KNQ/SNM
P11		A01265510HKN	REINFORCE MATERIAL	1	NN-7855 KKE/KNQ/SNM
P12		A04457600HKN	MENU LABEL	1	NN-7855 KKE/KNQ/SNM
P13		A06014000A	COOKING TRAY	1	

WIRING MATERIAL



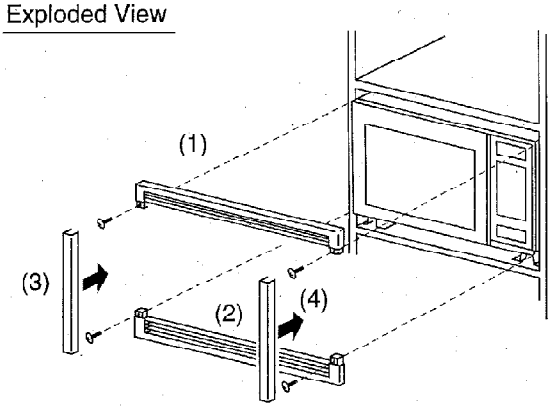
(S-760H QPQ)

Ref. No.		Part No.	Part Name & Description	Pcs/ Set	Remarks
W1		A030A7600QP	LEAD WIRE HARNESS	1	NN-6405,NN-6455 QPQ,NN-6705 QPQ, NN-6755 QPQ,NN-6855 QPQ,NN-7855 QPQ
W1		A030A7600JP	LEAD WIRE HARNESS	1	NN-6455 JPG/VPE,NN-6705 JPG, NN-6755 VPE,NN-6855 JPG,NN-7855 JPG/VPE
W1		A030A7650HN	LEAD WIRE HARNESS	1	NN-6755 KKE/KNQ,NN-7855 KKE/KNQ
W1		A030A7600SN	LEAD WIRE HARNESS	1	NN-6755 SNM,NN-7855 SNM
W2		A03537010AP	LEAD WIRE	1	NN-6405,NN-6455,NN-6705, NN-6755 KKE/KNQ/QPQ/VPE,NN-6855, NN-7855 JPG/KKE/KNQ/QPQ/VPE
W2		A03537600SN	LEAD WIRE	1	NN-6755 SNM,NN-7855 SNM
W3		A03547600SN	LEAD WIRE	1	NN-6755 SNM,NN-7855 SNM
W4		A50966520GP	FERRITE CORE	1	NN-6455 JPG,NN-6705 JPG, NN-6855 JPG,NN-7855 JPG

Ref. No.		Part No.	Part Name & Description	Pcs/ Set	Remarks
REF NO.75 NOISE FILTER(U)					
C1		ECQU2A104MN	POLYESTER CAPACITOR	1	(0.1 μF,250V,±20%)
C2,3		ECKDNS472MEX	CERAMIC CAPACITOR	2	(0.0047 μF,250V,±20%)
F1		A62316010BP	FUSE HOLDER	2	NN-6455 JPG/VPE,NN-6705 JPG, NN-6755 VPE,NN-6855 JPG
F1		ANE6231Q50GN	FUSE HOLDER	2	NN-7855 JPG/VPE
L1		A621A5540GP	FILTER COIL	1	NN-6455 JPG/VPE,NN-6705 JPG, NN-6755 VPE,NN-6855 JPG
L1		ANE621A7B0JN	FILTER COIL	1	NN-7855 JPG/VPE
R1		ERD25FJ564	CARBON FILM RESISTOR	1	NN-7855 JPG/VPE (560KΩ,1/4W,±20%)
R2		ERD25FJ564S	CARBON FILM RESISTOR	1	NN-6455 JPG/VPE,NN-6705 JPG, NN-6755 VPE,NN-6855 JPG (560KΩ,1/4W,±20%)
ZNR		ERZC10DK471B	VARISTOR	1	NN-7855 JPG/VPE
ZNR1		ERZC10DK621F	VARISTOR	1	NN-6455 JPG/VPE,NN-6705 JPG, NN-6755 VPE,NN-6855 JPG
ZNR2,3		ERZC10DK112A	VARISTOR	2	NN-6455 JPG/VPE,NN-6705 JPG, NN-6755 VPE,NN-6855 JPG

PARTS LIST FOR MICROWAVE OVEN TRIM KITS

Exploded View

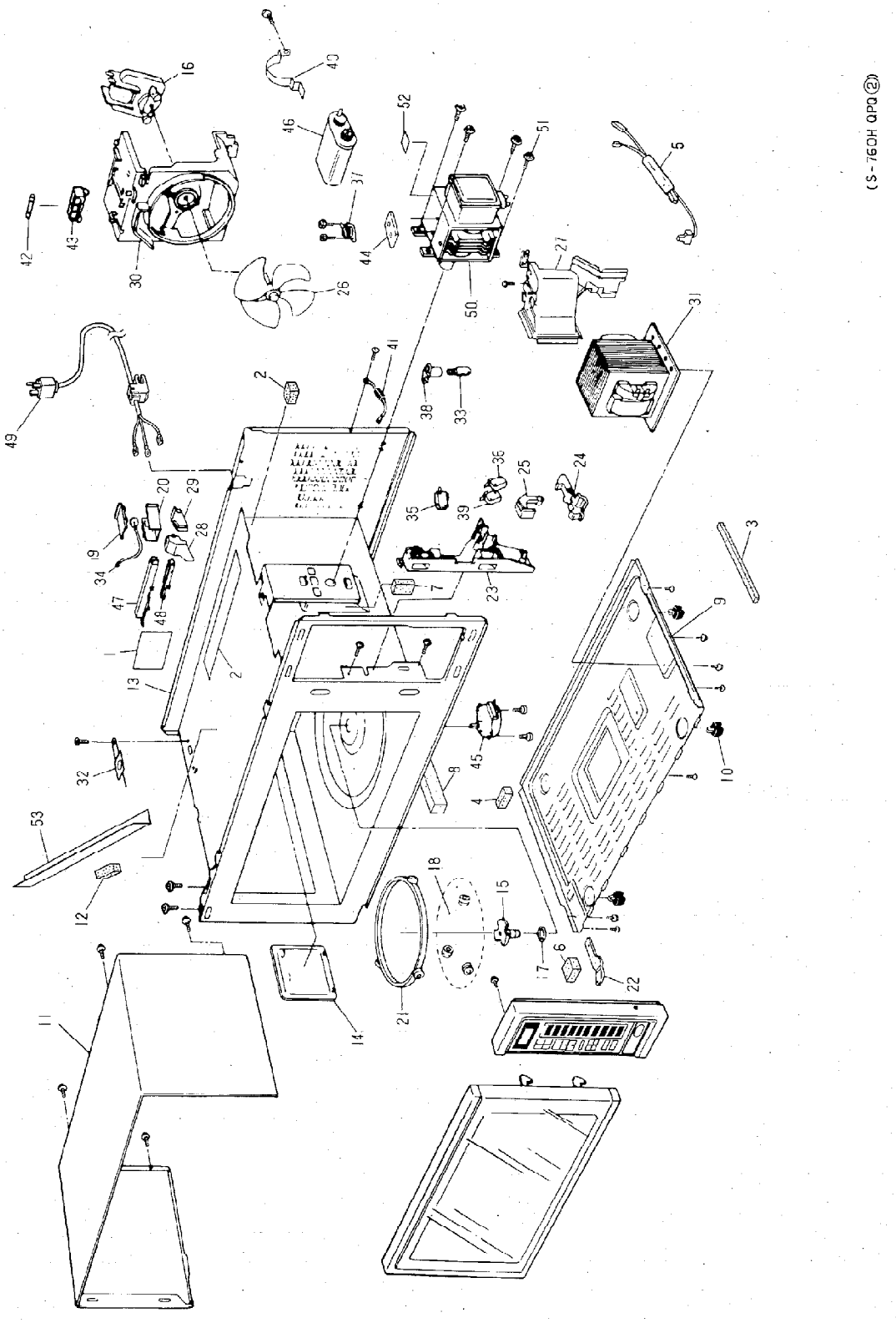


Trim kit Model No.	Top and Bottom Strip Ref No:1,2	Pcs/ Set	Side Strip Ref No:3,4	Pcs/ Set	Microwave Oven Model No.
NN-TK602	A1603A310TGS	2	A1601A310TGS	2	NN-6405,NN-6705
NN-TK652	A1603A141HGP	2	A1601A310HGP	2	NN-6455,NN-6755, NN-6855
NN-TK792	A16031J0HCP	2	A1601A020HCP	2	NN-7855

NOTE: The top and bottom strips have the same part number and the left and right side strips also have the same part number. These parts will be supplied on one piece per one part number.

EXPLODED VIEW AND PARTS LIST

EXPLODED VIEW (NN-6405A QPQ, NN-6455A QPQ, NN-6705A QPQ, NN-6755A QPQ, NN-6855A QPQ)



PARTS LIST

NN-6405A QPQ, NN-6455A QPQ, NN-6705A QPQ, NN-6755A QPQ, NN-6855A QPQ

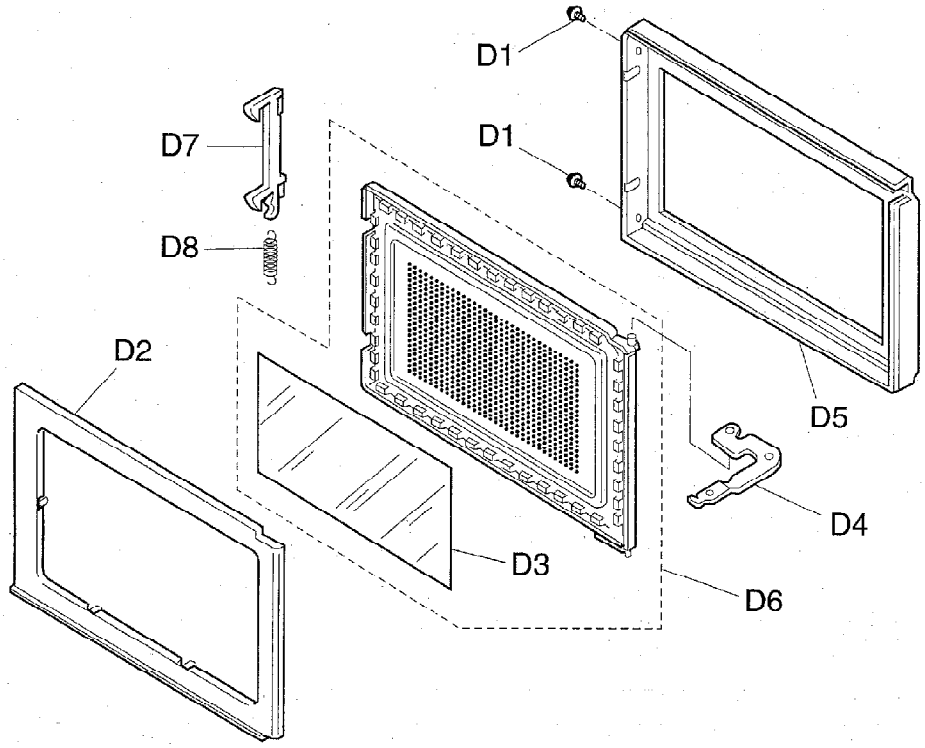
NOTE 1: When ordering replacement part(s), please use part number(s) shown in this parts list.
Do not use description of the part.
Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.
Items marked * supplied by MMCA. (U.S.A.)

Ref. No.		Part No.	Part Name & Description	Pcs/ Set	Remarks
*1		B00065460JP	CAUTION LABEL	1	
*2		AMQ0902000FD	CUSHION RUBBER	1	NN-6405A,NN-6455A
*3		AMQ0902000AH	CUSHION RUBBER A	1	
*4		AMQ0902000BA	CUSHION RUBBER A	1	
5		A606V7640QP	PROTECTOR DIODE	1	
*6		AMQ0904000BB	CUSHION RUBBER A	1	
*7		AMQ0908000AE	CUSHION RUBBER A	1	NN-6705A,NN-6755A,NN-6855A
*8		AMQ0928000BT	CUSHION RUBBER	1	
*9		B10017050AP	BASE	1	
*10		B10087050AP	RUBBER FOOT	4	
*11		B10096250QP	CABINET BODY (U)	1	NN-6405A,NN-6705A
*11		B10096240HQP	CABINET BODY (U)	1	NN-6455A,NN-6755A,NN-6855A
*12		B10495980CP	NEOPRENE CUSHION	1	
*13	⚠	B201A7640QP	OVEN	1	
*14		B20557050AP	COVER	1	
*15		B21315540AP	PULLEY SHAFT	1	
*16		2Z-9AUA.S	FAN MOTOR	1	(AC,24.8W,SINGLE)
*17		B21777050AP	WASHER	1	
*18		B202K4650AP	ROLLER B (U)	1	(NOTE 1)
19		A22135540AP	SENSOR BRACKET A	1	NN-6705A,NN-6755A,NN-6855A
20		A22145540AP	SENSOR BRACKET B	1	NN-6705A,NN-6755A,NN-6855A
*21		B290D5500AP	ROLLER RING (U)	1	
*22	⚠	B30077050AP	LOWER HINGE	1	
*23	⚠	B30204830AP	DOOR HOOK	1	
*24		B31374830AP	HOOK SPACER B	1	
*25		B31384830AP	HOOK SPACER C	1	
*26		B40085950AP	FAN	1	
*27		B40255540AP	AIR GUIDE A	1	
28		A40265540AP	AIR GUIDE B	1	NN-6705A,NN-6755A,NN-6855A
29		A40315540AP	AIR GUIDE C	1	NN-6705A,NN-6755A,NN-6855A
*30		B41444060AP	ORIFICE	1	

Ref. No.		Part No.	Part Name & Description	Pcs/ Set	Remarks
*31	⚠	B621C7650RP	H.V.TRANSFORMER	1	(1.5KVA)
32		A601L5180AP	TEMP SENSOR	1	
33		A60304080BP	INCANDESCENT LAMP	1	
34		A607S7050AP	STEAM SENSOR	1	NN-6705A,NN-6755A,NN-6855A
35	⚠	ANE61424L0AG	MICROSWITCH	1	(V-16G-3C26) PRIMARY LATCH SWITCH
36	⚠	A61425180AP	MICROSWITCH	1	(L-3C2-2) SECONDARY LATCH SWITCH
*37	⚠	B61456240QP	THERMAL CUTOUT	1	
*38	⚠	B61524740AQ	SOCKET	1	
39	⚠	A61785180AP	MICRO SWITCH	1	(L-2C2-2) SHORT SWITCH
*40		B61884060AP	CAPACITOR BRACKET	1	
*41	⚠	B62024000AP	DIODE,SI	1	
42	⚠	ANE6230Z70BP	FUSE	1	(8A)
*43		B62314000AP	FUSE HOLDER	1	
44		A62384650AP	SPACER	1	
45		A63264760JP	TURNTABLE MOTOR	1	(3W)
*46	⚠	B60904080GP	H.V.CAPACITOR	1	(1.14MF,AC2100V)
47		A64505540AP	EXHAUST GUIDE B	1	NN-6705A,NN-6755A,NN-6855A
48		A65435540AP	EXHAUST GUIDE C	1	NN-6705A,NN-6755A,NN-6855A
*49	⚠	B900C4760JP	AC CORD W/PLUG	1	(240V)
*50	⚠	2M210-M1F	MAGNETRON	1	
51		XTT4+8B	SCREW	4	(4X8) FOR MAGNETRON
*52		B03115460QP	N LABEL	1	
*53		B20325540AP	UPPER BRACKET	1	
*		B08877050AP	CAVITY SPRAY PAINT	1	SPRAY CAN, FOR REPAIR OF PAINTED OVEN CAVITY
*		B08877000AP	TOUCH-UP PAINT	1	BOTTLE WITH BRUSH, FOR REPAIR OF PAINTED OVEN CAVITY

NOTE 1 : When ordering the roller B assy, three rollers will be shipped.
When replacing the roller B, three rollers should be replaced at the same time.
Otherwise the glass cooking tray way not turn smoothly.

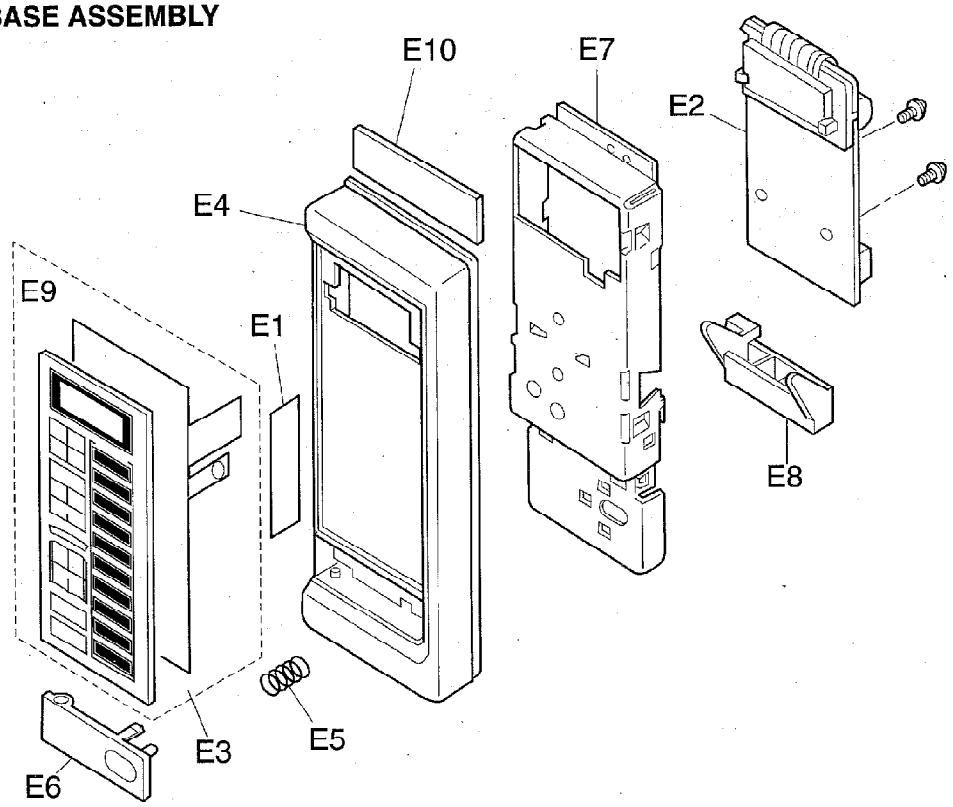
DOOR ASSEMBLY



(S-760H QPQ ②)

Ref. No.		Part No.	Part Name & Description	Pcs/ Set	Remarks
D1		XTBANE3+8BZ	SCREW	2	(3X8)
*D2	⚠	B30857050AP	DOOR C	1	NN-6405A,NN-6705A
*D2	⚠	B30857080HAP	DOOR C	1	NN-6455A,NN-6755A,N-6855A
*D3	⚠	B31457050AP	DOOR SCREEN A	1	
*D4	⚠	B30067050AP	UPPER HINGE	1	
*D5	⚠	B302A7050AP	DOOR A (U)	1	NN-6405A,NN-6705A
*D5	⚠	B302A7050HQP	DOOR A (U)	1	NN-6755A,N-6855A
*D5	⚠	B302A7080HAP	DOOR A (U)	1	NN-6455A
*D6	⚠	B302K7050AP	DOOR E (U)	1	NN-6405A,NN-6705A
*D6	⚠	B302K7080HAP	DOOR E (U)	1	NN-6455A,NN-6755A,N-6855A
*D7		B30187050AP	DOOR KEY	1	
*D8		B30214000AP	DOOR KEY SPRING	1	

ESCUTCHEON BASE ASSEMBLY



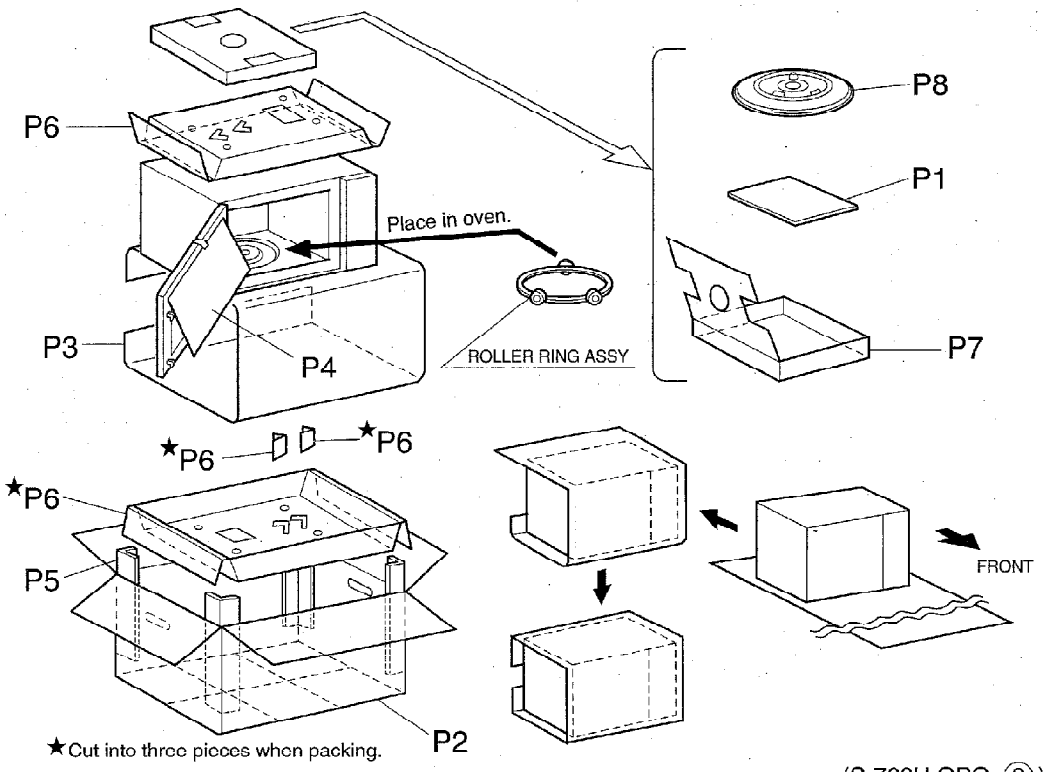
(S-760H QPQ ②)

Ref. No.		Part No.	Part Name & Description	Pcs/ Set	Remarks
＊E1		B00077950QP	NAME PLATE	1	NN-6405A
＊E1		B00077950HQP	NAME PLATE	1	NN-6455A
＊E1		B00077680QP	NAME PLATE	1	NN-6705A
＊E1		B00077680HQP	NAME PLATE	1	NN-6755A
＊E1		B00077640HQP	NAME PLATE	1	NN-6855A
＊E2		B603L7950QP	D.P.CIRCUIT (U)	1	NN-6405A,NN-6455A RTL (W/COMPONENT)
＊E2		B603L7680QP	D.P.CIRCUIT (U)	1	NN-6705A,NN-6755A RTL (W/COMPONENT)
＊E2		B603L7640QP	D.P.CIRCUIT (U)	1	NN-6855A RTL (W/COMPONENT)
＊E3		B630Y7950QP	MEMBRANE SWITCH (U)	1	NN-6405A (W/ESCUTCHEON SHEET)
＊E3		B630Y7950HQP	MEMBRANE SWITCH (U)	1	NN-6455A (W/ESCUTCHEON SHEET)
＊E3		B630Y7680QP	MEMBRANE SWITCH (U)	1	NN-6705A (W/ESCUTCHEON SHEET)
＊E3		B630Y7680HQP	MEMBRANE SWITCH (U)	1	NN-6755A (W/ESCUTCHEON SHEET)
＊E3		B630Y7640HQP	MEMBRANE SWITCH (U)	1	NN-6855A (W/ESCUTCHEON SHEET)
＊E4		B80347050AP	ESCUTCHEON BASE	1	NN-6405A,NN-6705A (NOTE 2)
＊E4		B80347080HAP	ESCUTCHEON BASE	1	NN-6455A,NN-6755A,NN-6855A (NOTE 2)
＊E5		B80375950AP	COOK BUTTON SPRING	1	
＊E6		B80727010AP	DOOR OPENING BUTTON	1	NN-6405A,NN-6705A
＊E6		B80727010AP	DOOR OPENING BUTTON	1	NN-6455A,NN-6755A,NN-6855A
＊E7		B81277050AP	BACK PLATE	1	
＊E8		B82567010AP	DOOR OPENING LEVER	1	

Ref. No.		Part No.	Part Name & Description	Pcs/ Set	Remarks
*E9		B83377950QP	ESCUTCHEON SHEET	1	NN-6405A
*E9		B83377950HQP	ESCUTCHEON SHEET	1	NN-6455A
*E9		B83377680QP	ESCUTCHEON SHEET	1	NN-6705A
*E9		B83377680HQP	ESCUTCHEON SHEET	1	NN-6755A
*E9		B83377640HQP	ESCUTCHEON SHEET	1	NN-6855A
*E10		B80027050AP	DISPLAY LENS	1	

NOTE 2 : Please order name plate together.

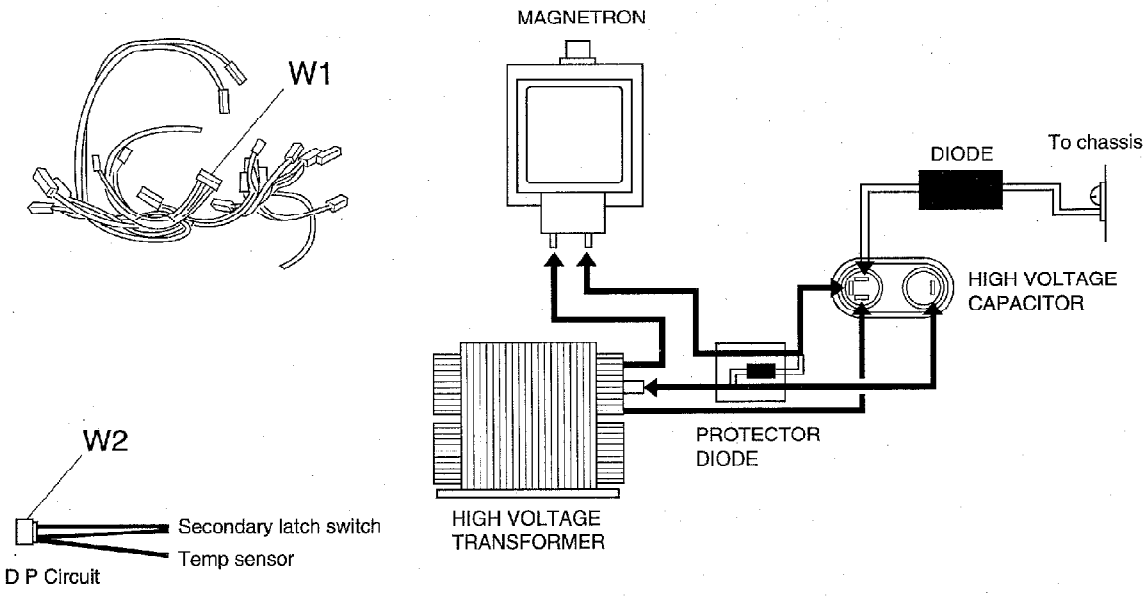
PACKING AND ACCESORIES



(S-760H QPQ ②)

Ref. No.		Part No.	Part Name & Description	Pcs/ Set	Remarks
＊P1		B00037600QP	INSTRUCTION BOOK	1	
＊P2		B02177790RP	PACKING CASE,PAPER	1	
＊P3		B01067600AP	VINIL SHEET	1	
＊P4		B01075640AP	DOOR SHEET	1	
＊P5		B01487720RP	CORNER POST	4	
＊P6		B01837050AP	CORRUGATED PACKING	2	
＊P7		B02217050AP	UPPER SUPPORT PACKING	1	
P8		A06014000AP	COOKING TRAY	1	

WIRING MATERIAL

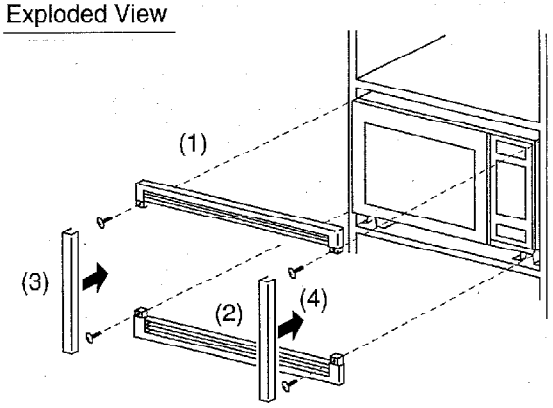


(S-760H QPQ ②)

Ref. No.		Part No.	Part Name & Description	Pcs/ Set	Remarks
*W1		B030A8440RP	LEAD WIRE HARNESS	1	NN-6405A,NN-6475A,NN-6425A,NN-6485A
*W2		B03537050AP	LEAD WIRE	1	

PARTS LIST FOR MICROWAVE OVEN TRIM KITS

Exploded View



Trim kit Model No.	Top and Bottom Strip Ref No:1.2	Pcs/ Set	Side Strip Ref No:3.4	Pcs/ Set	Microwave Oven Model No.
NN-TK602 NN-TK652	A1603A3101GS A1603141HGP	2 2	A1601A310TGS A1601A310TGS	2 2	NN-6405A,NN-6705A NN-6455A,NN-6755A, NN-6855A

NOTE: The top and bottom strips have the same part number and the left and right side strips also have the same part number. These parts will be supplied on one piece per one part number.

DIGITAL PROGRAMMER CIRCUIT

PARTS LIST

Ref. No.	Part No.	Description	Pcs/ Set	Remarks
BZ1	AEFB32EP2002	BUZZER	1	2.0KHZ
C10	ECA1HM102E	ELECTROLYTIC CAPACITOR,AL	1	1000 μF/50V/20%
C11	ECEA1HU101B	ELECTROLYTIC CAPACITOR,AL	1	100 μF/50V/20%
C13	ECEA1CKA100B	ELECTROLYTIC CAPACITOR,AL	1	10 μF/16V/20%
C14,15,21, 22,24,25,26	ECBT1E103ZF5	CERAMIC CAPACITOR	8	0.01 μF/25V −20%+80%
22,24,25,26,31				
C17,28,32	AECF50F104Z	CERAMIC CAPACITOR	3	0.1 μF/50V−20%+80%
C23	ECEA1HKA2R2B	ELECTROLYTIC CAPACITOR,AL	1	2.2 μ F/50V/20%
CN1	AEEMMF01505W	CONNECTOR	1	5PIN
CN2	AEEMMF00703W	CONNECTOR	1	NN-6705,NN-6755, NN-6855,NN-7655 3PIN
CN4	AEEMMF00D04W	CONNECTOR	1	NN-6405,NN-6455, NN-6705,NN-6755 KKE/ KNQ/QPQ/VPE, NN-6855,NN-7655 JPG/ KKE/KNQ/QPQ/VPE 4PIN
CN4	AEEMMF03D06W	CONNECTOR	1	NN-6755 SNM,NN-7655 SNM 6PIN
CN5	AEEM09FDZBTM	CONNECTOR	1	
CX1	AEFFT4H19GWT	CERAMIC RESONATOR	1	4.19MHZ
D10,11	AEDNERA1502	DIODE,SI	2	(1.0A)
D12,14,17,19	MA196-(TA5)	DIODE,SI	4	(0.1A)
D13	MA700A-(TA)	DIODE,SI	1	(0.03A)
D20	ERZC10DK621F	VARISTOR	1	
D21,22	ERZC10DK112A	VARISTOR	2	
DISP1	AEFR6CM9R	FLUORESCENT TUBE	1	
IC1	AEIC36123089	L.S.I	1	
IC2	AN6752	IC	1	
IC3	AEHMH705	IC	1	NN-6705,NN-6755, NN-6855,NN-7655
JPR1	ERD25VJ1R0T	CARBON FILM RESISTOR	1	NN-6405,NN-6455 QPQ/VPE,NN-6705 JPG,NN-6755 KNQ/SNM, NN-7655 KKE/SNM/VPE 1Ω,1/4W,±5%
JPR1	ERD25VJ163T	CARBON FILM RESISTOR	1	NN-6455 JPG,NN-7655 SNM 16KΩ,1/4W ±5%
JPR1	ERD25VJ683T	CARBON FILM RESISTOR	1	NN-6455 VPE,NN-7655 KNQ 68KΩ,1/4W,±5%
JPR1	ERD25VJ332T	CARBON FILM RESISTOR	1	NN-6705 JPG,NN-6855 QPQ 3.3KΩ,1/4W,±5%
JPR1	ERD25VJ152T	CARBON FILM RESISTOR	1	NN-6755 KKE 1.5KΩ,1/4W ±5%
JPR1	ERD25VJ622T	CARBON FILM RESISTOR	1	NN-6755 KNQ,NN-7655 QPQ 6.2KΩ,1/4W,±5%
JPR1	ERD25VJ103T	CARBON FILM RESISTOR	1	NN-6855 JPG,NN-7355 KKE 10KΩ,1/4W,±5%
JPR1	ERD25VJ303T	CARBON FILM RESISTOR	1	NN-7655 JPG/VPE 30KΩ,1/4W,±5%
JPR1,2	ERD25VJ1R0T	CARBON FILM RESISTOR	2	NN-6755 VPE 1Ω,1/4W ±5%
Q1	2SD2006QRTA	TRANSISTOR,SI,1.2W	1	(120MHZ)
Q2	2SD1991AQSTA	TRANSISTOR,SI,400MW	1	(150MHZ)
Q6	UN4211-(TA)	TRANSISTOR,SI,300MW	1	
R10,11	ERDS2TJ151T	CARBON FILM RESISTOR	2	150Ω,1/4W,±5%
R12,24,25, 26,28,29,37	ERDS2TJ103T	CARBON FILM RESISTOR	7	10KΩ,1/4W,±5%
R13	ERDS2TJ472T	CARBON FILM RESISTOR	1	NN-6405,NN-6455 4.7KΩ,1/4W,±5%
R13,14,15	ERDS2TJ472T	CARBON FILM RESISTOR	3	NN-6705,NN-6755, NN-6855,NN-7655 4.7KΩ,1/4W,±5%
R16,22	ERDS2TJ102T	CARBON FILM RESISTOR	2	1.0KΩ,1/4W,±5%
R17,31	ERDS2TJ332T	CARBON FILM RESISTOR	2	NN-6405,NN-6455, NN-6705,NN-6755 KKE/ KNQ/QPQ/VPE,NN-6855, NN-7655 JPG/KKE/ KNQ/QPQ/VPE 3.3KΩ,1/4W,±5%
R17,31,47	ERDS2TJ332T	CARBON FILM RESISTOR	3	NN-6755 SNM,NN-7655 SNM 3.3KΩ,1/4W,±5%
R20	ERDS2TJ333T	CARBON FILM RESISTOR	1	33KΩ,1/4W ±5%
R27,35	ERDS2TJ680T	CARBON FILM RESISTOR	2	NN-6755 SNM,NN-7655 SNM 68Ω,1/4W,±5%
R30,38,39, 41,42,43,44, 45,46,47,48	ERDS2TJ104T	CARBON FILM RESISTOR	11	NN-6405,NN-6455, NN-6705,NN-6755 KKE/ KNQ/QPQ/VPE,NN-6855, NN-7655 JPG/ KKE/KNQ/QPQ/VPE 100KΩ,1/4W,±5%
R30,38,39, 41,42,43,44, 45,46,48	ERDS2TJ104T	CARBON FILM RESISTOR	10	NN-6755 SNM,NN-7655 SNM 100KΩ,1/4W,±5%
R50	ERDS2TJ2R2T	CARBON FILM RESISTOR	1	2.2Ω,1/4W ±5%
R51,53	ERDS2TJ101T	CARBON FILM RESISTOR	2	100Ω,1/4W,±5%
RY1	⚠ AEG5J1EM18B	POWER RELAY	1	G5J-1-TP-NI-ER18 (18V)
RY2	⚠ AEBG5B18P-1	POWER RELAY	1	G5B-1-ER18 (18V)
SPACER	A82847010AP	SPACER CUSHION	1	FOR DISP
T1	ETP41KCN81QB	L.V.TRANSFORMER	1	
Z1	AEXBM5X104JT	COMPOUND-RESISTOR	1	100KΩX5
ZD1,2A	EDZ5R6ES2T1	ZENER DIODE,SI	2	

SERVICE FIXTURES AND TOOLS

EXTENSION CABLES

NOTE: To be used when repairing the DPC board assembly directly on the oven for easy access of the board.

Ref. No.	Part No.	Description	Pcs/ Set	Remarks
	AT40P003	3 pin Extension Cable	1	Cable No. 48
	AT40P004	4 pin Extension Cable	1	Cable No. 47 Except SNM
	AT40P005	5 pin Extension Cable	1	Cable No. 46
	AT40E006	1 pinX6 Extension Cable	1	Cable No. 9
	AT40P006	6 pin Extension Cable	1	Cable No. 49 SNM

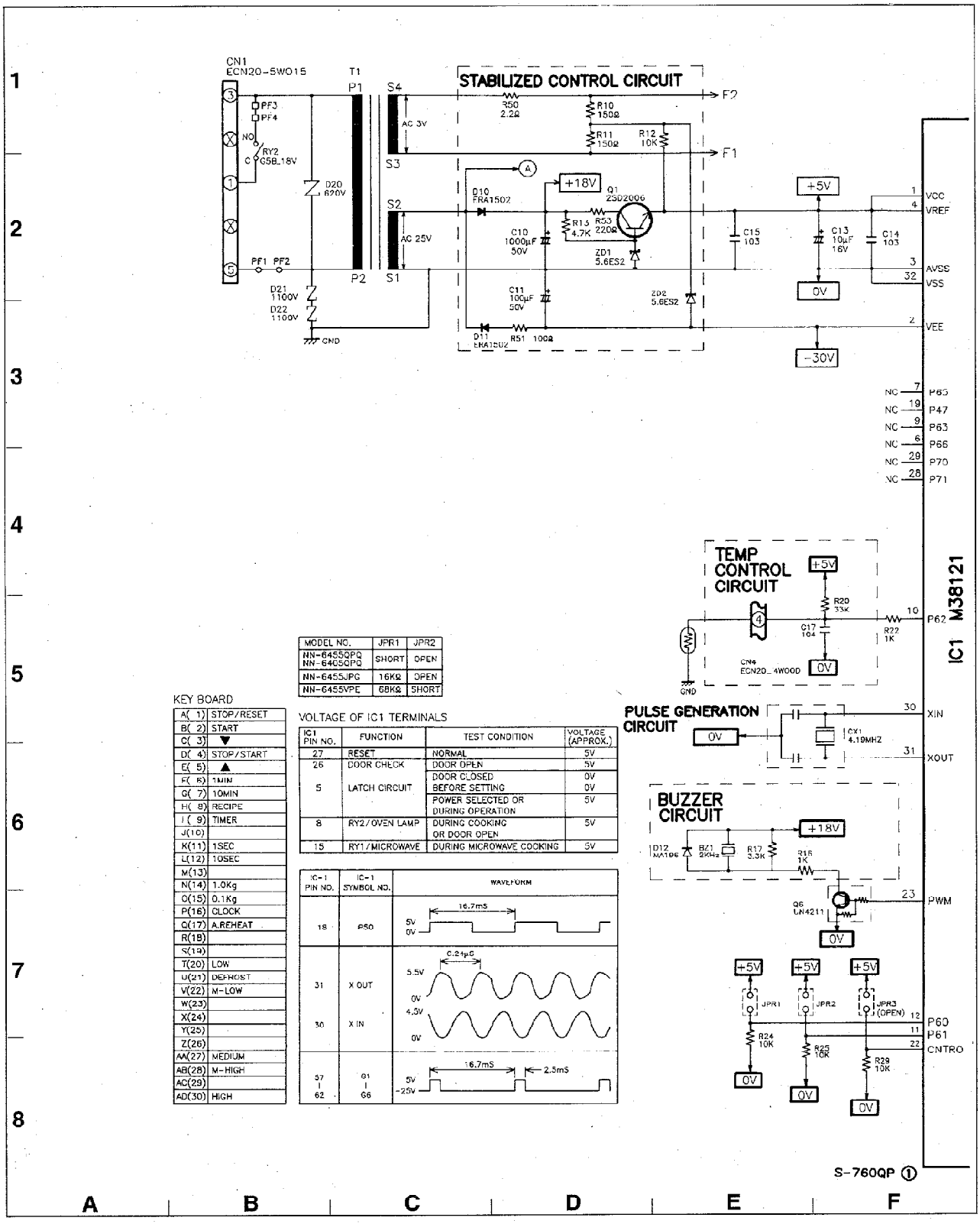
DPC COMMON CHECKER AND ITS CABLE

NOTE: To be used only when DPC common checker is available.

Ref. No.	Part No.	Description	Pcs/ Set	Remarks
	ANE600ZK70QP	DPC. Common Checker	1	
	AT30A7020AP	DPC. Checker Cable	1	NOTE (Except SNM)
	AT30A7600SN	DPC. Checker Cable	1	SNM

DIGITAL PROGRAMMER CIRCUIT (NN-6455/A, NN-6405/A)

SCHEMATIC DIAGRAM



MODEL NO.	JPR1	JPR2
NN-6455QPQ NN-6405QPQ	SHORT	OPEN
NN-6455JPG	16KΩ	OPEN
NN-6455VPE	68KΩ	SHORT

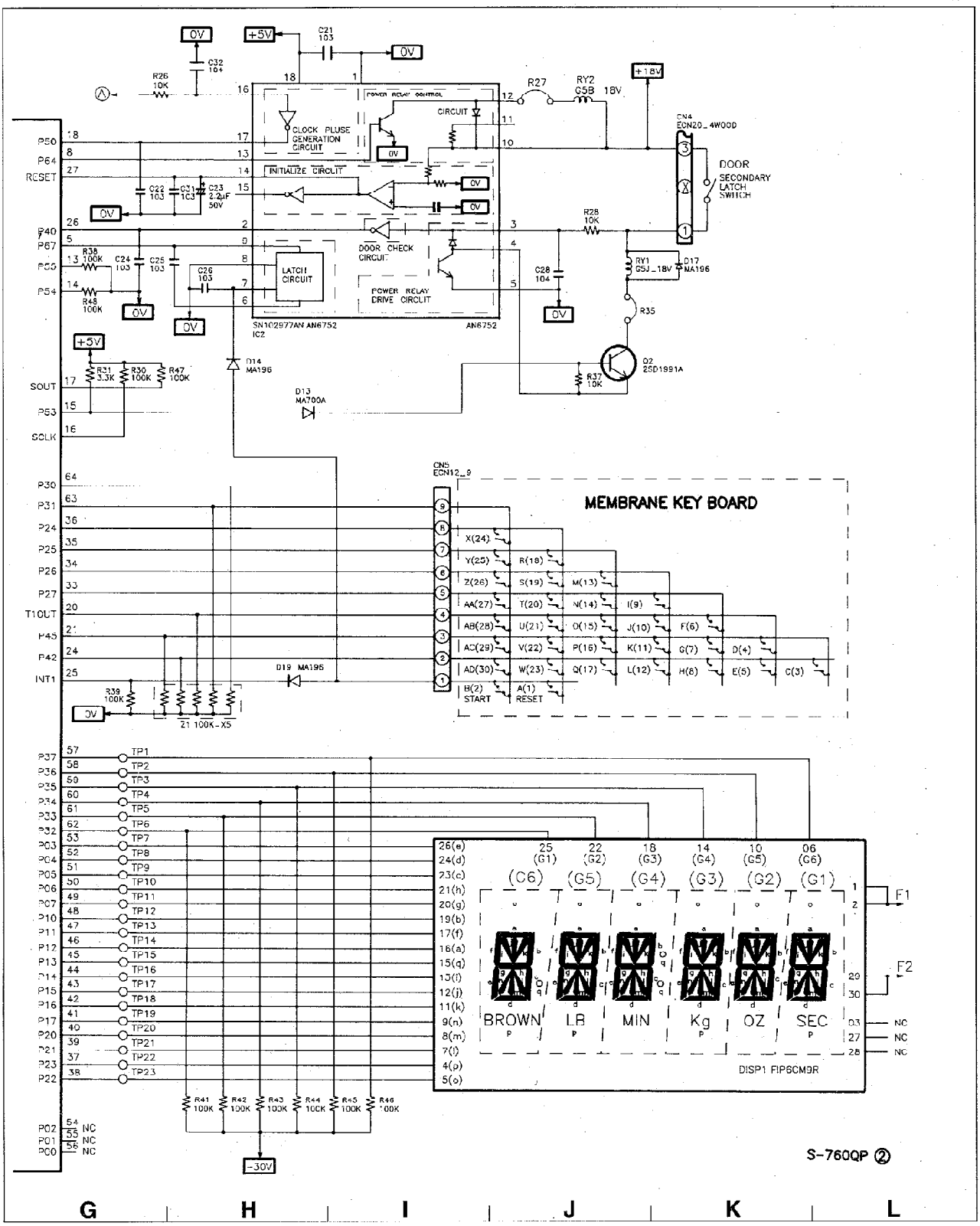
KEY BOARD

A(1)	STOP/RESET
B(2)	START
C(3)	▼
D(4)	STOP/START
E(5)	▲
F(6)	1MIN
G(7)	10MIN
H(8)	RECIPE
I (9)	TIMER
J(10)	
K(11)	1SEC
L(12)	10SEC
M(13)	
N(14)	1.0Kg
O(15)	0.1Kg
P(16)	CLOCK
Q(17)	A.REHEAT
R(18)	
S(19)	
T(20)	LOW
U(21)	DEFROST
V(22)	M-LOW
W(23)	
X(24)	
Y(25)	
Z(26)	
AA(27)	MEDIUM
AB(28)	M-HIGH
AC(29)	
AD(30)	HIGH

VOLTAGE OF IC1 TERMINALS

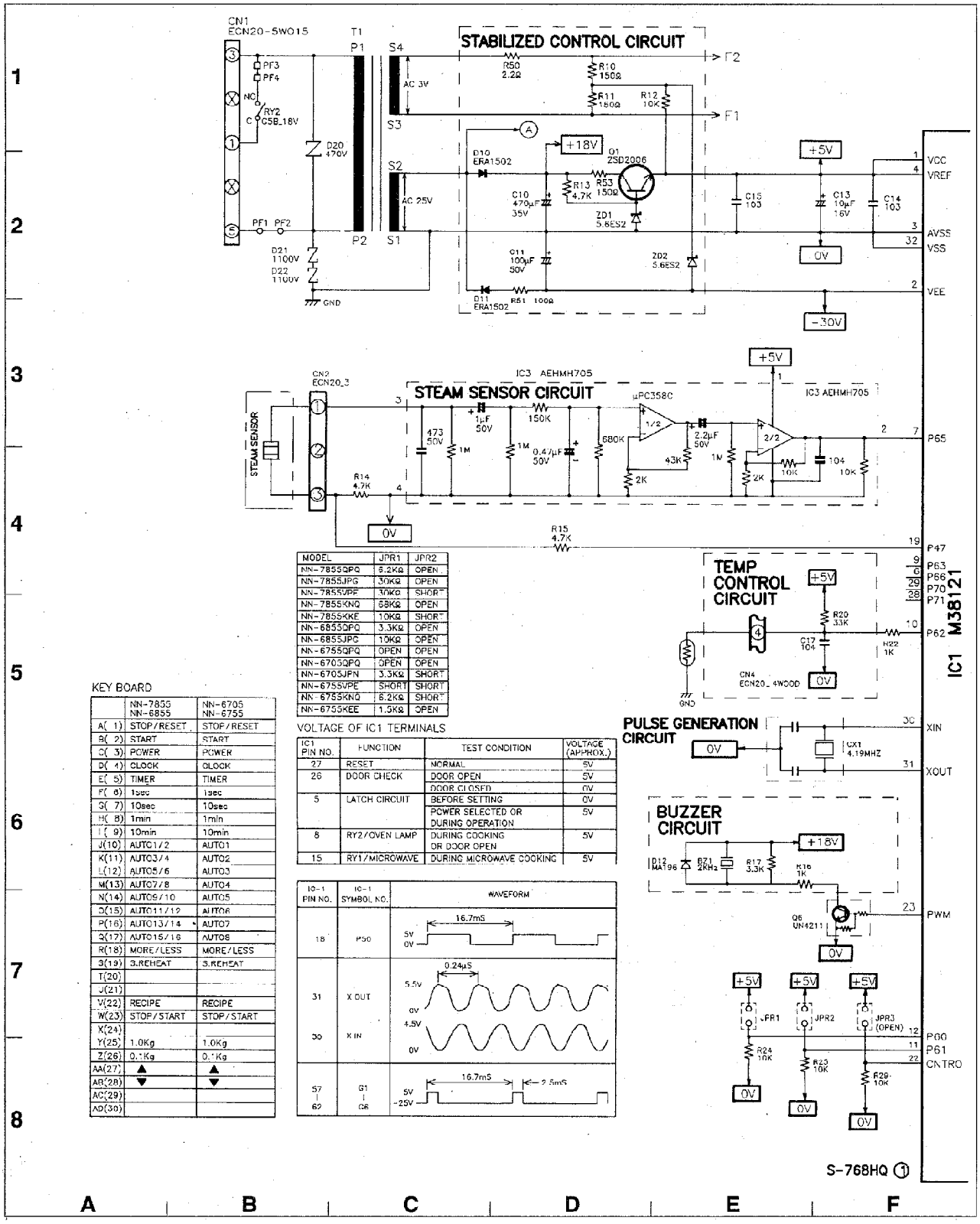
IC1 PIN NO.	FUNCTION	TEST CONDITION	VOLTAGE (APPROX.)
27	RESET	NORMAL	5V
26	DOOR CHECK	DOOR OPEN	5V
5	LATCH CIRCUIT	DOOR CLOSED BEFORE SETTING	0V
		POWER SELECTED OR DURING OPERATION	5V
8	RY2/OVEN LAMP	DURING COOKING OR DOOR OPEN	5V
15	RY1/MICROWAVE	DURING MICROWAVE COOKING	5V

IC-1 PIN NO.	IC-1 SYMBOL NO.	WAVEFORM
18	P50	16.7mS, 5V, 0V
31	X OUT	0.24μS, 5.5V, 0V
30	X IN	4.3V, 0V
57 – 62	G1 – G6	16.7mS, 2.5mS, 5V, -25V


MEMBRANE KEY BOARD
CLOCK PLUSE GENERATION CIRCUIT
INITIALIZE CIRCUIT
LATCH CIRCUIT
DOOR CHECK CIRCUIT
POWER RELAY DRIVE CIRCUIT
DOOR SECONDARY LATCH SWITCH
SN102977AN AN6752
AN6752
IC2
BROWN
LB
MIN
Kg
OZ
SEC
DISP1 FIP8CM9R
S-760QP ②

DIGITAL PROGRAMMER CIRCUIT (NN-7855, NN-6855, NN-6705/A, NN-6755/A)

SCHEMATIC DIAGRAM



KEY BOARD

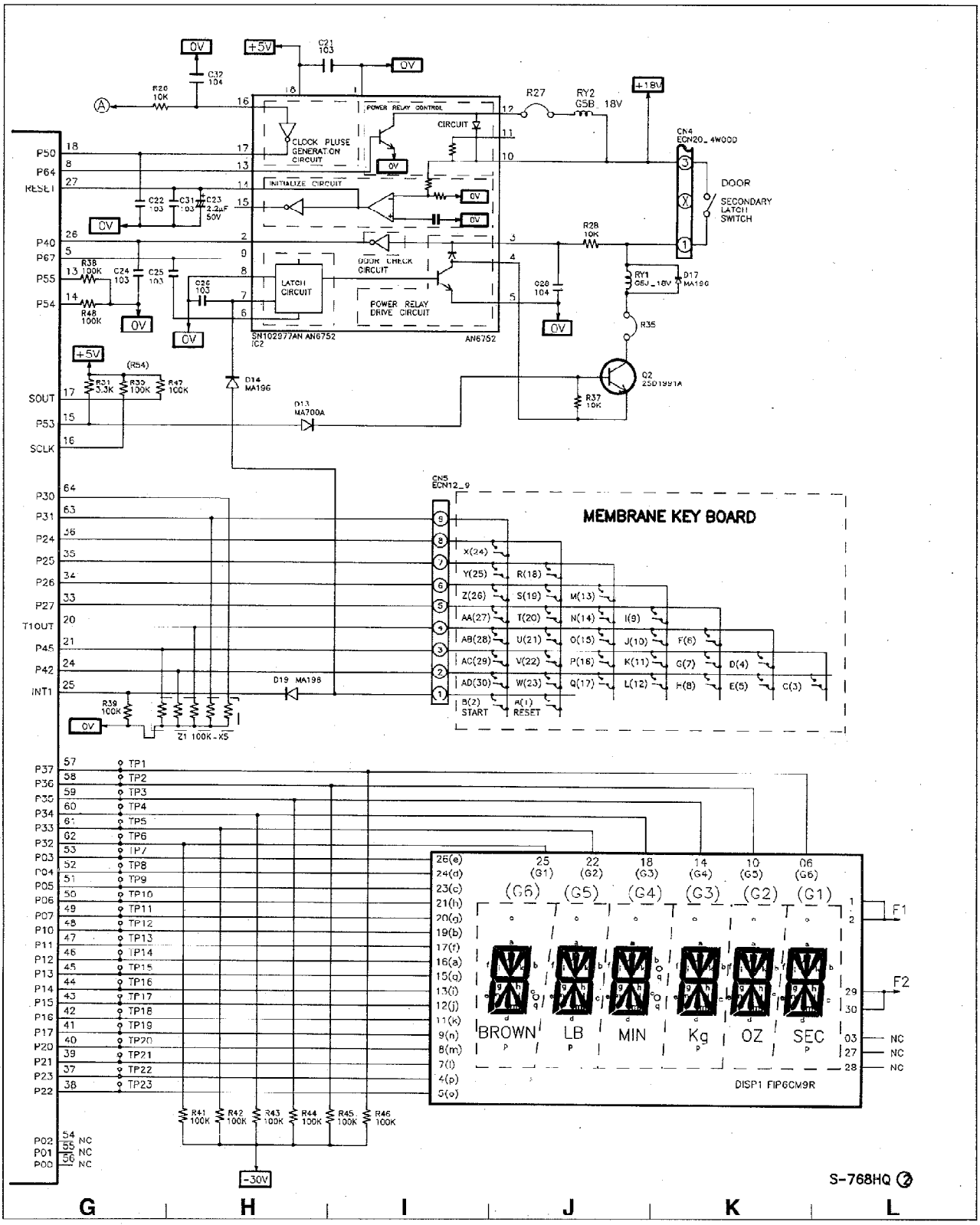
	NN-7855 NN-6855	NN-6705 NN-6755
A(1)	STOP/RESET	STOP/RESET
B(2)	START	START
C(3)	POWER	POWER
D(4)	CLOCK	CLOCK
E(5)	TIMER	TIMER
F(6)	1sec	1sec
G(7)	10sec	10sec
H(8)	1min	1min
I (9)	10min	10min
J(10)	AUTO1/2	AUTO1
K(11)	AUTO3/4	AUTO2
L(12)	AUTO5/6	AUTO3
M(13)	AUTO7/8	AUTO4
N(14)	AUTO9/10	AUTO5
O(15)	AUTO11/12	AUTO6
P(16)	AUTO13/14	AUTO7
Q(17)	AUTO15/16	AUTO8
R(18)	MORE/LESS	MORE/LESS
S(19)	S.REHEAT	S.REHEAT
T(20)		
U(21)		
V(22)	RECIPE	RECIPE
W(23)	STOP/START	STOP/START
X(24)		
Y(25)	1.0Kg	1.0Kg
Z(26)	0.1Kg	0.1Kg
AA(27)	▲	▲
AB(28)	▼	▼
AC(29)		
AD(30)		

MODEL	JPR1	JPR2
NN-7855QPQ	6.2KΩ	OPEN
NN-7855JPG	30KΩ	OPEN
NN-7855VPE	30KΩ	SHORT
NN-7855KNQ	68KΩ	OPEN
NN-7855KKE	10KΩ	SHORT
NN-6855QPQ	3.3KΩ	OPEN
NN-6855JPC	10KΩ	OPEN
NN-6755QPQ	OPEN	OPEN
NN-6705QPQ	OPEN	OPEN
NN-6705JPN	3.3KΩ	SHORT
NN-6755VPE	SHORT	SHORT
NN-6755KNQ	6.2KΩ	SHORT
NN-6755KEE	1.5KΩ	OPEN

VOLTAGE OF IC1 TERMINALS

IC1 PIN NO.	FUNCTION	TEST CONDITION	VOLTAGE (APPROX.)
27	RESET	NORMAL	5V
26	DOOR CHECK	DOOR OPEN	5V
		DOOR CLOSED	0V
5	LATCH CIRCUIT	BEFORE SETTING	0V
		POWER SELECTED OR DURING OPERATION	5V
8	RY2/OVEN LAMP	DURING COOKING OR DOOR OPEN	5V
15	RY1/MICROWAVE	DURING MICROWAVE COOKING	5V

IC-1 PIN NO.	IC-1 SYMBOL NO.	WAVEFORM
18	P50	16.7mS, 5V, 0V
31	X OUT	0.24μS, 5.5V, 0V
30	X IN	4.5V, 0V
57 ~ 62	G1 ~ G6	16.7mS, 5V, -25V


MEMBRANE KEY BOARD
DISP1 FIP6CM9R
S-768HQ
SN102977AN AN6752
AN6752
BROWN
LB
MIN
Kg
OZ
SEC
DOOR
SECONDARY LATCH SWITCH
POWER RELAY CONTROL
CLOCK PLUSE GENERATION CIRCUIT
INITIALIZE CIRCUIT
DOOR CHECK CIRCUIT
LATCH CIRCUIT
POWER RELAY DRIVE CIRCUIT
RY2 G5B 18V
RY1 G5J 18V
D17 MA196
D14 MA196
D13 MA700A
D19 MA196
Q2 2SD1991A
CN4 ECN20_4W00D
CN5 ECN12_9
Z1 100K-X5
G
H
I
J
K
L